BECON RECEIVE SITES

NEW FCC NO.	OLD FCC ID	SCHOOL	ADDRESS	CITY	[illegible]	[illegible]	[illegible]	[illegible]	GROUND ELEV	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
107	12	COLBERT ELEM.	2701 Plunkett St.	Hollywood	26-00-00	80-09-41	7.52	322.0	10	43	46	Anixter-Mark	P-25A72G
108	10	MC NICOL MIDDLE	[illegible]	Hollywood	[illegible]	[illegible]	[illegible]	[illegible]	10	41	44	Anixter-Mark	P-25A72G
109	85	STIRLING ELEM.	5500 Stirling Road	Hollywood	26-02-37	80-12-02	3.66	323.1	5	58	60	Anixter-Mark	P-25A48G
110	29	HALLANDALE ELEM.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	68	70	Anixter-Mark	P-25A48G
111	30	HALLANDALE HIGH	720 N.W. 9th Ave.	Hallandale	25-59-35	80-09-43	7.86	324.4	10	54	57	Anixter-Mark	P-25A72G
112	157	SOUTH AREA ALTERNATIVE	[illegible] Court	Hallandale	25-59-35	80-09-53	7.76	325.4	10	56	58	Anixter-Mark	P-25A48
113	31	HALLANDALE ADULT/COMM CTR.	1000 S.W. 3rd St.	Hallandale	25-58-49	80-09-47	8.55	328.2	11	55	57	Jerrold-Taco	EPA-4
114	80	SHERIDAN HILLS ELEM.	5001 Thomas St.	Hollywood	26-01-50	80-11-58	4.46	329.0	10	58	60	Anixter-Mark	P-25A48
115	100	ORANGE BROOK ELEM.	715 S. 46th Ave.	Hollywood	26-00-13	80-11-20	6.39	332.8	10	58	60	Anixter-Mark	P-25A48
116	109	SHERIDAN VOC TECH CENTER	5400 W. Sheridan St.	Hollywood	26-01-53	80-12-29	4.14	335.4	8	62	64	Anixter-Mark	P-25A48
117	40	LAKE FOREST ELEM.	3550 S.W. 48th Ave.	Hollywood	25-58-44	80-11-31	7.87	339.7	7	55	57	Andrew	P4F-25
118	108	QUEST CENTER	6401 Charleston St.	Hollywood	26-02-24	80-13-04	3.37	340.5	8	35	36	Andrew	P2F-25
119	95	WATKINS ELEM.	3601 S.W. 56th Ave.	Hollywood	25-58-40	80-11-51	7.83	342.3	7	64	66	Andrew	P4F-25
120	96	WEST HOLLYWOOD ELEM.	6301 Hollywood Blvd.	Hollywood	26-00-41	80-12-52	5.31	345.5	9	68	70	Anixter-Mark	P-25A48
121	102	MC ARTHUR HIGH	6501 Hollywood Blvd.	Hollywood	26-00-38	80-13-04	5.32	347.8	9	28	31	Anixter-Mark	P-25A72G
122	33	T.C.I. of SOUTH FLORIDA CABLE	18601 N.W. 2nd Ave.	North Miami	25-56-41	80-12-18	9.90	348.7	10	100	150	Andrew	P4F-25
123	0	NOVA EISENHOWER ELEM	6501 S.W. 39th St.	Davie	26-04-22	80-13-59	0.93	349.3	8	59	60	Anixter-Mark	P-25A24
124	60	PEMBROKE PINES ELEM.	6700 S.W. 9th St.	Pembroke Pines	26-00-00	80-13-19	5.88	351.5	7	23	25	Anixter-Mark	P-25A48
125	1	APOLLO MIDDLE	6800 Arthur St.	Hollywood	26-01-10	80-13-32	4.63	352.1	8	56	57	Conifer	PT-2521
126	54	NOVA BLANCHE FORMAN ELEM.	3521 Davie Road	Davie	26-04-27	80-14-02	0.81	352.6	8	59	60	Anixter-Mark	P-25A24
127	0	DRIFTWOOD MIDDLE	2751 N.W. 70th Terr.	Hollywood	26-02-04	80-13-44	3.58	353.1	6	39	40	Andrew	P2F-25
128	37	HOLLYWOOD PARK ELEM.	901 N. 69th Way	Hollywood	26-01-01	80-13-39	4.79	353.8	8	68	70	Anixter-Mark	P-25A48G
129	47	MIRAMAR ELEM.	6831 S.W. 26th St.	Miramar	25-59-15	80-13-30	6.82	354.3	8	68	70	Anixter-Mark	P-25A48G
130	81	SHERIDAN PARK ELEM.	2310 N. 70th Terr.	Hollywood	26-01-47	80-13-48	3.90	354.7	7	51	52	Anixter-Mark	P-25A24
131	61	PERRY, ANNABEL C. ELEM.	6850 S.W. 34th St.	Miramar	25-58-44	80-13-32	7.41	355.0	7	39	41	Anixter-Mark	P-25A48G
132	62	PERRY, HENRY D. MIDDLE	3400 Wildcat Way	Miramar	25-58-[illegible]	80-13-39	7.38	356.0	7	68	70	Anixter-Mark	P-25A48G
133	8	BOULEVARD HEIGHTS ELEM.	7201 Johnson St.	Hollywood	26-01-03	80-14-01	4.73	358.3	8	51	52	Anixter-Mark	P-25A24
134	91	SUNSHINE ELEM.	7737 W. LaSalle Blvd.	Miramar	25-59-0[illegible]	80-14-25	[illegible]	[illegible]	6	77	80	Anixter-Mark	P-25A72G
135	24	FAIRWAY ELEM.	7850 Fairway Blvd.	Miramar	25-58-31	80-14-38	7.65	3.8	5	45	48	Anixter-Mark	P-25A72G
136	0	WHISPERING PINES SCHOOL	3609 S.W. 89th Ave.	Miramar	25-58-[illegible]	80-15-1[illegible]	[illegible]	[illegible]	7	68	70	Anixter-Mark	P-25A48G
137	55	NOVA HIGH	3600 College Ave.	Davie	26-04-32	80-14-15	0.72	9.7	6	59	60	Anixter-Mark	P-25A24
138	48	MIRAMAR HIGH	3601 S.W. 89th Ave.	Miramar	[illegible]	80-15-4[illegible]	[illegible]	[illegible]	7	34	37	Anixter-Mark	P-25A72G
139	66	PINES MIDDLE	200 N.W. Douglas Road	Pembroke Pines	26-00-32	80-15-52	5.61	18.5	6	35	36	Anixter-Mark	P-25A24
140	158	SEA CASTLE ELEM.	9600 Miramar Blvd.	Miramar	[illegible]	80-16-2[illegible]	[illegible]	19.[illegible]	[illegible]	57	60	Anixter-Mark	P-25A72G
141	18	DAVIE ELEM.	7025 S.W. 39th St.	Davie	26-04-22	80-14-27	0.96	20.1	6	19	20	Conifer	PT-2521
142	58	PASADENA LAKES ELEM.	8801 Pasadena Blvd.	Pembroke Pines	26-01-43	80-15-[illegible]	4.28	22.[illegible]	4	68	70	Anixter-Mark	P-25A48G
143	0	PALM COVE ELEM	11601 S.W. 9th St.	Pembroke Pines	26-00-05	80-18-13	7.20	35.9	4	77	80	Anixter-Mark	P-25A72G
144	15	COOPER CITY HIGH	9401 Stirling Road	Cooper City	26-02-42	[illegible]	[illegible]	[illegible]	5	45	46	Anixter-Mark	P-25A24
145	67	PIONEER MIDDLE	5350 S.W. 90th Ave.	Cooper City	26-03-03	80-16-07	3.17	40.0	5	45	46	Conifer	PT-2521
146	65	PINES LAKES ELEM.	10300 Johnson St.	Pembroke Pines	[illegible]	[illegible]	[illegible]	[illegible]	5	52	55	Anixter-Mark	P-25A72G
147	59	PEMBROKE LAKES ELEM.	11251 Taft St.	Pembroke Pines	26-01-28	80-18-20	6.07	45.6	4	36	37	Anixter-Mark	P-25A24
148	0	YOUNG, WALTER C. RES. CENTER	901 N.W. 129th Ave.	Pembroke Pines	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	55	57	Anixter-Mark	P-25A48G
149	0	EMBASSY CREEK ELEM	10905 S.E. Lake Blvd.	Cooper City	26-01-47	80-18-20	5.82	48.2	4	58	60	Anixter-Mark	P-25A48G
150	14	COOPER CITY ELEM.	5080 S.W. 92nd Ave.	Cooper City	[illegible]	[illegible]	[illegible]	50.0	7	45	48	Andrew	P2F-25
151	28	GRIFFIN ELEM.	5050 S.W. 116th Ave.	Cooper City	26-03-21	80-18-11	4.67	63.5	6	41	42	Anixter-Mark	P-25A24
152	102	SILVER RIDGE ELEM.	9100 S.W. 36th St.	Davie	[illegible]	[illegible]	[illegible]	[illegible]	4	67	70	Anixter-Mark	P-25A72G
153	159	HAWKES BLUFF ELEM.	5900 S.W. 160th Ave.	Fort Lauderdale	26-02-43	80-21-41	8.30	70.2	6	67	70	Anixter-Mark	P-25A72G
154	160	COUNTRY ISLES ELEM.	2300 Country Isles Road	Fort Lauderdale	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	68	70	Anixter-Mark	P-25A48G
155	161	TEQUESTA TRACE MIDDLE	1800 Indian Trace	Fort Lauderdale	26-06-16	80-23-29	9.76	97.4	6	46	48	Anixter-Mark	P-25A48G
156	0	GULF & PACIFIC COMMUNICATIONS	1274 Weston Rd.	Weston	[illegible]	[illegible]	8.03	99.4	6	69	70	Conifer	PT-2521
157	0	INDIAN TRACE ELEM	400 Indian Trace	Fort Lauderdale	26-06-54	80-23-31	9.91	101.6	6	57	60	Anixter-Mark	P-25A72G
158	97	WESTERN HIGH	1200 S.W. 136th Ave.	Fort Lauderdale	26-06-17	80-19-45	5.95	102.5	8	67	68	Anixter-Mark	P-25A24

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BECON RECEIVE SITES

NEW FCC NO.	OLD FCC NO	SCHOOL	ADDRESS	CITY	LAT	LONG	DIST	AZ	GROUND ELEV	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
159	25	FLAMINGO ELEM.	1130 S.W. 133rd Ave.	Davie	26-06-17	80-19-32	5.73	103.0	8	35	36	Anixter-Mark	P-25A24
160	0	SAWGRASS ELEM.	[illegible]	Sunrise	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	58	60	Anixter-Mark	P-25A48G
161	163	CENTRAL PARK ELEM.	777 N. Nob Hill Road	Plantation	26-07-47	80-17-01	4.22	135.3	8	57	60	Anixter-Mark	P-25A72G
162	51	NOB HILL ELEM.	2100 N.W. 104th Ave.	Sunrise	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39	40	Jerrold-Taco	EPA-2
163	164	SANDPIPER ELEM.	3700 Hiatus Road	Sunrise	26-10-18	80-17-44	6.96	147.8	11	68	70	Anixter-Mark	P-25A48G
164	0	WELLEBY ELEM.	[illegible]	Sunrise	26-10-03	[illegible]	6.35	151.9	10	68	70	Anixter-Mark	P-25A48G
165	3	BAIR MIDDLE	9100 N.W. 21st Manor	Sunrise	26-09-03	80-16-15	4.96	154.0	7	41	42	Varian	AE-2
166	38	HORIZON ELEM.	2101 Pine Island Road	Sunrise	26-09-04	80-16-09	4.93	155.1	7	37	38	Anixter-Mark	P-25A24
167	0	WESTPINE MIDDLE	9393 N.W. 50th St.	Sunrise	26-11-11	80-16-20	7.26	161.8	10	46	48	Anixter-Mark	P-25A48G
168	4	BANYAN ELEM.	8800 N.W. 50th St.	Sunrise	26-11-07	80-16-08	7.13	163.1	10	49	50	Jerrold-Taco	EPA-2
169	165	WESTCHESTER ELEM.	12405 Royal Palm Blvd.	Coral Springs	26-15-35	80-17-26	12.43	164.1	10	50	52	Andrew	P4F-25
170	166	RIVERSIDE ELEM.	11450 Riverside Drive	Coral Springs	26-13-57	80-16-49	10.44	164.6	9	68	70	Anixter-Mark	P-25A48G
171	168	CORAL SPRINGS ELEM.	3601 N.W. 110th Ave.	Coral Springs	26-16-23	80-17-27	13.32	165.1	11	49	51	Anixter-Mark	P-25A48
172	0	CABLE TV OF CORAL SPRINGS	12409 N.W. 35th St.	Coral Springs	26-16-35	80-17-29	13.55	165.2	13	100	120	Conifer	PT-2521
173	68	PIPER HIGH	8000 N.W. 44th St.	Sunrise	26-10-36	80-15-26	6.37	168.0	9	61	63	Anixter-Mark	P-25A48G
174	167	TARAVELLA HIGH	10600 Riverside Dr.	Coral Springs	26-13-55	80-16-11	10.26	168.1	10	52	53	Anixter-Mark	P-25A24
175	49	MIRROR LAKE ELEM.	1200 N.W. 72nd Ave.	Plantation	26-08-25	80-14-41	3.77	171.6	8	39	40	Anixter-Mark	P-25A24
176	170	CORAL SPRINGS MIDDLE	10300 W. Wiles Road	Coral Springs	26-17-10	80-15-53	13.88	172.6	16	49	52	Anixter-Mark	P-25A72G
177	171	COUNTRY HILLS ELEM.	10550 Westview Drive	Coral Springs	26-17-50	80-15-54	14.65	172.9	12	58	60	Anixter-Mark	P-25A48G
* 178	169	STONEMAN DOUGLAS HIGH	5901 Pine Island Road	Parkland	[illegible]	80-15-58	15.16	172.9	12	65	67	Anixter-Mark	P-25A48G
179	172	TAMARAC ELEM.	7601 University Dr.	Tamarac	26-12-58	80-15-13	9.02	173.0	11	35	37	Anixter-Mark	P-25A48
180	173	MAPLEWOOD ELEM.	9850 Ramblewood Dr.	Coral Springs	[illegible]	[illegible]	10.96	173.1	12	60	61	Anixter-Mark	P-25A24
181	63	PETERS ELEM.	851 N.W. 68th Ave.	Plantation	26-08-04	80-14-24	3.34	175.5	7	58	60	Anixter-Mark	P-25A48G
182	70	PLANTATION HIGH	6901 N.W. 16th St.	Plantation	[illegible]	[illegible]	4.05	175.6	8	35	37	Anixter-Mark	P-25A48
183	93	VILLAGE ELEM.	2100 N.W. 70th Ave.	Sunrise	26-09-09	80-14-25	4.58	176.5	8	54	56	Anixter-Mark	P-25A48
184	71	PLANTATION MIDDLE	6600 W. Sunrise Blvd.	Plantation	26-08-10	[illegible]	[illegible]	177.1	[illegible]	59	60	Conifer	PT-2521
185	174	RAMBLEWOOD ELEM.	8950 Shadowwood Blvd.	Coral Springs	26-14-51	80-14-41	11.12	177.1	12	50	52	Andrew	P4F-25
186	176	FOREST HILLS ELEM.	3100 N.W. 85th Ave.	Coral Springs	26-15-05	80-14-27	12.63	178.6	13	44	47	Anixter-Mark	P-25A72G
187	175	PINEWOOD ELEM.	1600 S.W. 83rd Ave.	North Lauderdale\	26-12-28	80-14-20	8.38	178.7	10	59	60	Anixter-Mark	P-25A24
188	177	RAMBLEWOOD MIDDLE	8505 W. Atlantic Blvd.	Coral Springs	26-14-10	80-14-21	10.33	178.6	13	51	52	Andrew	P2F-25
189	178	CORAL PARK ELEM.	8401 Westview Drive	Coral Springs	26-17-59	80-14-14	14.70	179.7	13	78	80	Anixter-Mark	P-25A48G
181A	0	FORT LAUDERDALE POLICE DEPT.	1300 W. Broward Blvd.	Fort Lauderdale	26-07-10	80-09-35	6.31	242.8	[illegible]	100	300	Andrew	P4F-25
FUTURE		EE MIDDLE SCHOOL	Sample Rd. @ NW 124th Ave	Coral Springs	26-16-15	80-17-41	13.26	163.9	0	0	0	Andrew	FUTURE
FUTURE		SILVER TRAIL MIDDLE	Sheridan @ NW 184th Ave	Pembroke Pines	26-01-39	80-23-29	10.48	87.5	0	0	0	Andrew	FUTURE
FUTURE		INDIAN RIDGE MIDDLE	Nob Hill Rd. @ SW 14th St	Davie	26-06-11	80-17-04	3.26	111.3	0	0	0	Andrew	FUTURE
FUTURE		CHAPEL TRAIL ELEM	Taft St @ NW 196th Ave	Pembroke Pines	[illegible]	80-24-26	11.59	[illegible]	0	0	64	Anixter-Mark	P-25A48G
FUTURE		EAGLE TRACE ELEM	Indian Trace @ I-595	Weston	26-07-37	80-23-58	10.58	105.6	0	0	64	Anixter-Mark	P-25A48G
FUTURE		I-91	[illegible]	Coconut Creek	[illegible]	[illegible]	15.66	[illegible]	0	0	0	Andrew	FUTURE
FUTURE		SILVER PALMS ELEM	I-75 @ Pines Blvd	Pembroke Pines	26-01-07	80-20-55	8.42	56.7	0	0	0	Andrew	FUTURE
FUTURE		EAGLE RIDGE ELEM	Coral Spgs Dr @ W. View	Coral Springs	[illegible]	80-16-53	14.75	169.9	0	0	0	Andrew	FUTURE
FUTURE		FLANAGAN HIGH SCHOOL	12800 Taft Street	Pembroke Pines	26-01-18	80-19-17	6.93	50.4	0	0	0	Andrew	FUTURE
FUTURE		TECHNICAL SUPPORT SERVICES	7720 W. Oakland Park Blvd	Sunrise	26-09-53	80-16-15	5.55	168.0	8	30	30	Andrew	FUTURE

10/10/2001

Station Information

		Undesired			Desired		
Station -							
Station Name	:	Miami, FL			Ft. Lauderdale, FL		
Licensee	:	Dade County Schools			Broward County Schools		
Channel Groups	:	G			G		
Call Signs	:	KTB85			KTZ22		
Coordinates (° , ' , ") -							
North Latitude	:	25	46	20	26	5	9
West Longitude	:	80	11	20	80	14	8
Elevations -		**feet**		**meters**	**feet**		**meters**
Ground	:	3.0		0.9	9.0		2.7
Tower Height AGL	:	786.0		239.6	260.0		79.2
Antenna Radiation Centerline Height AGL	:	780.0		237.7	254.0		77.4
Antenna Radiation Centerline Height AMSL	:	783.0		238.6	263.0		80.2
Antenna -							
Manufacturer	:	Andrew			Andrew		
Type or Model #	:	HMD16HC			HMD16HO		
Gain (dBi)	:	16			14		
Azimuth (°)	:	295			Omni		
Beam Tilt (°)	:	1.30			0.50		
Polarization	:	H			V		
Output Power -							
Maximum EIRP (dBW)	:	31.3			28.0		
Maximum EIRP (Watts)	:	1349			631		

Engineering Declaration
Of
Scott D. Ritchie

In response to the Opposition to Petition to Deny filed January 31, 2001, by The School Board of Miami-Dade County, licensee of ITFS station KTB-85, the associated Amendment and Request for Waiver, also filed January 31, 2001, and the Engineering Statements of Ryan Wilhour of Kessler and Gehman and David Mietus of DeLawder Communications, I offer the following information.

On behalf of School Board of Broward County, I have reviewed the above mentioned Opposition, Amendment and Request for Waiver, and all associated engineering. I have performed an independent analysis of the proposed modification of station KTB-85, and I have determined that the proposal will cause substantial interference to the operation of station KTZ-22 licensed to Broward County Schools.

The School Board of Miami-Dade County ("Dade") is the licensee of the F-Group channels (KTB85) in Miami Florida. The School Board of Broward County ("Broward") is the licensee of station KTZ22 (G-Group) in Fort Lauderdale, FL. Dade has requested, by application dated September 15, 1995, to modify station KTB85 to change from the F-Group to the G-Group channels, to change location to downtown Miami, to increase power, to change transmit antenna, and to add digital service. On January 31, 2001, Dade amended their application to increase the mechanical and electrical beam-tilt, and change the digital emission modulation type. Dade's proposed location is 21.8 miles from the Broward transmit location.

In order to facilitate the processing of the modification application of KTB85, for the past six years, representatives from Dade and Bell South (the Miami Wireless Cable Operator) have proposed various solutions to resolve interference between Dade and Broward. These proposals have included the following:

Frequency Offset
Mechanical and Electrical Beam Tilt
Upgraded Receive Antennas

I have analyzed the proposals, and have determined that no combination of the above mentioned configurations would adequately resolve the interference between the two systems, for three reasons.

1. Dade's application states that KTZ-22 was not eligible for a protected service area ("PSA") at the time of the original application filing (see Interference Study of Kessler & Gehman Exhibit 1 Page 4), and is therefore not eligible for protected service area protection from the amendment. Dade's application requests digital modulation, subject to the Digital Declaratory Ruling in which PSA protection was afforded to all ITFS licensees. Dade's amendment formally requests Digital modulation, including OFDM, qualifying it as a major amendment. For these reasons, Broward is eligible for PSA protection. Dade's modification and amendment cause interference within Broward's PSA.

2. Dade's amendment uses a combination of electrical and mechanical beam tilt to reduce signal to Broward's receive sites. Dade did not include an elevation pattern for its proposed antenna, which is not an off the shelf model. While Dade's use of Beam Tilt reduces signal to most of Broward's receive sites, it actually increases signal to four of them. Dade's modification and amendment cause interference to Broward receive sites.

3. Dade proposes to upgrade Broward receive sites to reduce interference. In 1994 Broward upgraded its receive antennas to reduce interference from the Miami B-Group. Dade proposes to operate at a higher elevation and higher power than the B-Group, increasing the interference levels. Even with upgraded receive antennas, Dade's modification and amendment will cause interference. Dade's proposal to upgrade receive antennas does not include a proposal to upgrade all current receive sites, only sites registered as of September, 1995, does not propose to modify towers or other structures in order to accommodate the larger receive antennas, does not include a timeline for the upgrades, and does not include a proposal for resolving interference to future sites. As currently proposed, it is unacceptable to Broward for Dade to upgrade Broward's receive antennas, as the upgrades will not resolve all interference issues.

At the time of the Dade proposal, Broward County School District had 189 schools (see Attachment A) receiving educational programming from its ITFS network. Currently, there are 240 schools in service, with additional schools being added continuously. These schools are spread over an area averaging 25 miles wide and 30 miles long encompassing most of Broward County. These Schools each receive locally generated educational programming on eight ITFS channels sixteen and a half (16 ½) hours a day, five days a week. The system operates at 50 watts transmitter power, an omni-directional antenna, and high gain receive antennas designed to maximize signal level and reduce interference. Broward Schools have in the past received interference from Miami ITFS B-Group station WHR866, and have already modified (in 1994) their polarization in order to reduce interference. In addition, Broward has installed high gain, high performance receive antennas to reduce interference. Nevertheless, Broward Schools continue to periodically receive interference from the Miami B-Group station. Broward has constructed towers for each of its schools, on which to install specific receive antennas. Dade's proposal to install new receive antennas is impossible without installing new towers. Furthermore, Dade has not proposed any upgrades to schools that have been added since 1995, nor proposed any solution for resolving interference to future receive sites. That is why Broward must be eligible for PSA protection. For these reasons, it is not an acceptable solution for Dade to upgrade Broward receive antennas.

Dade proposes to operate digital at 50 Watts average transmit power (200 Watts peak power), and an Andrew HMD16HC-W directional cardioid transmit antenna oriented at 295 degrees located 234.4 meters above ground level (770 feet). They propose to utilize -1.3 degrees of electrical beam tilt and -0.8 degrees of mechanical beam tilt at an azimuth of 355.0 degrees. Peak EiRP would be 31.3 dBW.

Dade proposed to Broward to utilize frequency offset, yet they propose to utilize digital transmissions. There will be no benefit from frequency offset when digital transmission is used, therefore no decrease in required Desired to Undesired (D/U) signal level ratio is acceptable.

Dade proposes to use an antenna with –1.3 degrees of electrical beam tilt, yet there is no antenna elevation pattern included in their application. According to representatives from Andrew Corporation, and according to Andrew Catalog Number 38, the elevation pattern for antenna model HMD16HW-W is based on –0.5 degrees of tilt. The elevation pattern for HMD16HW-W-1.5 which is the same antenna with –1.5 degrees of electrical tilt, is available from Andrew, but differs from the –0.5 degree tilt pattern. In other words, you cannot just shift the standard elevation pattern to change the tilt. In order to get the pattern for HMD16HW-W-1.3, Andrew would have to generate a new elevation pattern. Dade has not submitted such a pattern with its application, therefore there is no way to determine the actual decrease in signal level due to beam tilt toward Broward receive sites. Since the antenna is not an off the shelf model, the predicted decrease in signal level due to mechanical and electrical tilt was not used in the attached engineering analysis. Rather, the study assumes peak signal in the vertical plane, and uses the standard horizontal radiation pattern for the proposed antenna.

An interference analysis using such parameters is attached. Attachment B is a receive site interference analysis. The parameters used are those specified in the Dade amendment. It demonstrates that out of the 189 receive sites studied, 88 (identified with an asterisk), will have a D/U ratio of less than the required 45 dB, when the existing receive antenna pattern is used. It should be noted that not every existing receive antenna has an available radiation pattern. Some of the antennas in use are no longer being manufactured, and the antenna radiation pattern is not available. Those with an available receive antenna radiation pattern are in Bold. The receive antenna in use at each school is identified on Attachment A. The interference analysis of Ryan Wilhour used an Andrew antenna pattern for some sites that is not the receive antenna in use (see Interference Study of Kessler & Gehman Exhibit 2 Page 2A). In cases where the existing antenna pattern was not available, the FCC standard receive antenna pattern was assumed. Additionally, Attachment B shows the D/U ratio using just the FCC reference receive antenna for all receive sites. In this analysis, 97 receive locations have a D/U ration less than the required 45 dB. Attachment C is a map showing the Miami and Broward transmit locations, the 189 BECON receive locations (using the FCC reference receive antenna), and the 45 dB D/U contour. The map shows that approximately half of the BECON receive sites are outside the contour, and will therefore receive interference. The map also shows that a majority of BECONs 35 mile protected service area ("PSA") will receive interference. Finally, the last part of Attachment B is a study showing the interference level to all 189 schools using the proposed antenna upgrade identified in the Dade amendment. It demonstrates that even if all schools were to use the proposed high performance antenna, there would still be interference to 27 schools.

The Dade Amendment increases Dade's signal level to 4 of the Broward Schools through its use of mechanical and electrical Beam Tilt. In addition, the Dade Amendment increases signal level to an additional 4 hypothetical sites by more than 6 dB. This is shown on Attachment D. The request also asks for Digital modulation not requested in the original application (see Dade amendment application, FCC Form 330, Page 9). These changes qualify the amendment as a major amendment. As a result, Broward is entitled to PSA protection.

In conclusion, it is without reason to expect that two co-channel ITFS Systems can coexist 22 miles apart from one another. That is the situation in Dade and Broward Counties. Dade has asked Broward to accept interference to almost half of its receive sites. The attached interference analyses demonstrate that even with the upgraded receive antennae, there will be harmful interference to Broward Schools.

I hereby certify under penalty of perjury that the forgoing is true and correct to the best of my knowledge, that I am the engineer responsible for the research and preparation of the above information, that I am familiar with Part 21 and 74 of the Commission's rules, and that I am technically qualified to perform this study.

Scott D. Ritchie   Date: 10/29/01

Scott D. Ritchie
Senior Engineer
Cornerstone Wireless Communications

BECON RECEIVE SITES

NEW FCC NO.	OLD FCC NO.	SCHOOL	ADDRESS	CITY	LAT	LONG	DIST	AZ	GROUND ELEV.	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
1	92	TROPICAL ELEM.	1500 S.W. 66th Ave.	Plantation	26-06-10	80-14-07	1.17	180.9	5	39	40	Conifer	PT-2521
2	113	HUNT, JAMES S. ELEM.	7800 N.W. 35th Ct.	Coral Springs	26-16-23	80-13-52	12.87	181.3	12	47	48	Jerrold-Taco	EPA-2
3	0	RIVERGLADES ELEM	7400 Park Side Drive	Parkland	26-19-17	80-13-45	16.20	181.5	15	77	80	Anixter-Mark	P-25A72G
4	115	SILVER LAKES MIDDLE	7600 Tam O'Shanter Blvd.	North Lauderdale	26-12-50	80-13-37	8.81	183.6	10	42	44	Anixter-Mark	P-25A48
5	116	NORTH LAUDERDALE ELEM.	7500 Kimberly Blvd.	North Lauderdale	26-12-59	80-13-35	8.99	183.8	10	37	38	Anixter-Mark	P-25A24
6	114	MORROW ELEM.	[illegible] S.W. 76th Terr.	North Lauderdale	26-13-37	80-13-31	9.72	183.9	12	39	41	Andrew	P4F-25
7	117	CORAL SPRINGS HIGH	7201 W. Sample Road	Coral Springs	26-16-23	80-13-14	12.90	184.3	12	62	64	Andrew	P4F-25
8	119	FOREST GLEN MIDDLE	6400 Wiles Road	Coral Springs	26-17-08	80-12-53	13.79	185.6	13	46	48	Anixter-Mark	P-25A48G
9	118	ATLANTIC WEST ELEM.	301 N.W. 69th Terr.	Margate	26-14-00	80-13-10	10.19	185.8	15	40	41	Anixter-Mark	P-25A24
10	0	PARK SPRINGS ELEM.	5600 N.W. 66th Terr.	Coral Springs	26-17-30	80-12-36	14.24	186.5	14	67	70	Anixter-Mark	P-25A72G
11	120	MARGATE ELEM.	6300 N.W. 18th St.	Margate	26-15-02	80-12-37	11.43	188.0	13	31	32	Anixter-Mark	P-25A24
12	76	ROYAL PALM ELEM.	1951 N.W. 56th Ave.	Lauderhill	26-09-03	80-13-32	4.50	188.2	8	33	34	Jerrold-Taco	EPA-2
13	121	MARGATE MIDDLE	500 N.W. 65th Ave.	Margate	26-14-10	80-12-42	10.43	188.3	12	34	35	Anixter-Mark	P-25A24
14	0	TELECABLE OF BROWARD	5000 Johnson Rd.	Coconut Creek	26-18-40	80-11-37	15.71	189.7	15	60	110	Anixter-Mark	P-25A72G
15	123	BROADVIEW ELEM.	1800 S.W. 62nd Ave.	Pompano Beach	26-12-17	80-12-25	8.36	192.4	10	35	36	Anixter-Mark	P-25A24
16	79	SEMINOLE MIDDLE	6200 S.W. 16th St.	Plantation	26-06-06	80-13-55	1.11	191.7	5	19	20	Conifer	PT-2521
17	122	WINSTON PARK ELEM.	4000 Winston Park Blvd.	Coconut Creek	26-17-44	80-11-01	14.78	192.7	14	58	60	Anixter-Mark	P-25A48G
18	124	ATLANTIC VOCATIONAL CENTER	4700 Coconut Creek Pkwy.	Coconut Creek	26-14-34	80-11-33	11.12	194.1	10	32	33	Conifer	PT-2521
19	45	LAUDERHILL MIDDLE	1901 N.W. 49th Ave.	Lauderhill	26-08-56	80-13-01	4.48	195.2	8	59	60	Conifer	PT-2521
20	125	COCONUT CREEK HIGH	1400 N.W. 44th Ave.	Coconut Creek	26-14-[illegible]	80-11-01	11.50	196.4	10	38	39	Conifer	PT-2521
21	11	CASTLE HILL ELEM.	2640 N.W. 46th Ave.	Lauderhill	26-09-33	80-12-42	5.25	196.7	7	45	46	Anixter-Mark	P-25A24
22	0	QUIET WATERS ELEM.	4150 W. Hillsborough Blvd	Deerfield Beach	26-19-01	80-09-23	16.64	197.3	15	68	70	Anixter-Mark	P-25A48G
23	126	COCONUT CREEK ELEM.	500 N.W. 45th Ave.	Coconut Creek	26-14-13	80-11-01	10.88	197.4	14	40	41	Anixter-Mark	P-25A24
24	44	LAUDERHILL P.T. ELEM.	4747 N.W. 14th St.	Lauderhill	26-08-36	80-12-53	4.15	198.4	7	41	42	Anixter-Mark	P-25A24
25	0	DREW, CHARLES ELEMENTARY	1000 N.W. 31 Ave.	Pompano Beach	26-14-31	80-09-43	11.67	203.2	16	59	60	Anixter-Mark	P-25A24
26	0	CROSS CREEK SCHOOL	1010 N.W. 31 Ave.	Pompano Beach	26-14-33	80-09-40	11.73	203.4	16	68	70	Anixter-Mark	P-25A48G
27	0	CYPRESS RUN ALTERN. CENTER	2300 N.W. 18TH St.	Pompano Beach	26-15-11	80-09-10	12.60	204.2	15	14	15	Conifer	PT-2521
28	127	DREW, CHARLES RES. CENTER	2600 N.W. 9th Ct.	Pompano Beach	26-14-25	80-09-25	11.69	204.8	13	50	51	Anixter-Mark	P-25A24
29	129	DEERFIELD BEACH HIGH	910 S.W. 15th St.	Deerfield Beach	26-17-45	80-07-05	16.19	206.9	21	67	70	Anixter-Mark	P-25A72G
30	128	ANDERSON, BOYD H. HIGH	3050 N.W. 41st St.	Lauderdale Lakes	26-10-36	80-11-05	7.00	207.0	10	59	61	Anixter-Mark	P-25A48
31	132	ORIOLE ELEM.	3081 N.W. 39th St.	Lauderdale Lakes	26-10-27	80-11-08	6.82	207.3	10	68	70	Anixter-Mark	P-25A48G
32	131	TEDDER ELEM.	4157 N.E. 1st Terr.	Pompano Beach	26-16-44	80-07-27	14.96	207.5	18	77	80	Anixter-Mark	P-25A72G
33	133	DEERFIELD PARK ELEM.	627 S.W. 2nd Ave.	Deerfield Beach	26-18-31	80-06-24	17.30	207.6	16	48	50	Andrew	P4F-25
34	72	PLANTATION PARK ELEM.	875 S.W. 54 Ave.	Plantation	26-06-52	80-13-20	1.79	207.6	7	29	31	Anixter-Mark	P-25A48G
35	134	BRIGHT HORIZONS CENTER	3901 N.E. 1st Terr.	Pompano Beach	26-16-33	80-07-26	14.80	208.1	15	35	36	Andrew	P2F-25
36	42	LAUDERDALE LAKES MIDDLE	3911 N.W. 30th Ave.	Lauderdale Lakes	26-10-26	80-11-02	6.86	207.9	10	55	57	Anixter-Mark	P-25A48
37	135	DEERFIELD BEACH ELEM.	650 N.E. 1st St.	Deerfield Beach	26-19-10	80-05-44	18.28	208.5	10	66	68	Anixter-Mark	P-25A48
38	136	PARK RIDGE ELEM.	5200 N.E. 9th Ave.	Pompano Beach	26-17-44	80-06-31	16.45	208.8	15	43	44	Conifer	PT-2521
39	130	MARKHAM, ROBERT C. ELEM.	1501 N.W. 15th Ave.	Pompano Beach	26-14-41	80-08-16	12.51	209.2	10	25	26	Conifer	PT-2521
40	137	DEERFIELD BEACH MIDDLE	701 S.E. 6th Ave.	Deerfield Beach	26-18-29	80-05-52	17.53	209.4	10	67	70	Anixter-Mark	P-25A72G
41	138	CRYSTAL LAKE MIDDLE	3551 N.E. 3rd Ave.	Pompano Beach	26-16-21	80-07-07	14.76	209.6	21	42	44	Anixter-Mark	P-25A48G
42	139	PALMVIEW ELEM.	2601 N.E. 1st Ave.	Pompano Beach	26-[illegible]	80-07-27	14.01	209.7	17	41	42	Anixter-Mark	P-25A24
43	140	SANDERS PARK ELEM.	800 N.W. 16th St.	Pompano Beach	26-14-52	80-08-00	12.83	209.8	15	77	80	Anixter-Mark	P-25A72G
44	141	ELY HIGH	1201 N.W. 6th Ave.	Pompano Beach	26-14-27	80-08-03	12.39	210.7	10	78	80	Anixter-Mark	P-25A48G
45	69	PLANTATION ELEM.	301 N.W. 46th Ave.	Plantation	26-07-25	80-12-39	3.01	211.1	8	25	26	Anixter-Mark	P-25A24
46	142	CONTINENTAL CABLE CO.	141 N.W. 16th St.	Pompano Beach	26-14-59	80-07-26	13.22	211.6	17	87	190	Anixter-Mark	P-25A48
47	143	CRESTHAVEN ELEM.	801 N.E. 25th St.	Pompano Beach	26-15-45	80-06-49	14.33	212.1	15	88	90	Anixter-Mark	P-25A48G
48	144	NORCREST ELEM.	3951 N.E. 16th Ave.	Pompano Beach	26-16-46	80-06-04	15.76	212.1	12	41	43	Anixter-Mark	P-25A48G
49	145	POMPANO BEACH MIDDLE	310 N.E. 6th St.	Pompano Beach	26-14-09	80-07-13	12.57	214.9	17	46	47	Anixter-Mark	P-25A24
50	146	CYPRESS ELEM.	851 S.W. 3rd Ave.	Pompano Beach	26-13-09	80-07-45	11.31	215.9	8	77	80	Anixter-Mark	P-25A72G
51	112	WINGATE OAKS CENTER	1211 N.W. 33rd Terr.	Fort Lauderdale	26-08-22	80-11-33	4.55	216.3	7	58	60	Anixter-Mark	P-25A48G
52	147	POMPANO BEACH ELEM.	700 N.E. 13th Ave.	Pompano Beach	26-14-18	80-06-32	13.12	217.0	15	78	80	Anixter-Mark	P-25A48G

BECON RECEIVE SITES

NEW FCC NO.	OLD FCC NO.	SCHOOL	ADDRESS	CITY	LAT	LONG	DIST	AZ	GROUND ELEV.	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
53	148	POMPANO MULTI-PURPOSE CTR.	1400 N.E. 6th St.	Pompano Beach	26-14-11	80-06-38	12.95	217.0	15	32	33	Anixter-Mark	P-25A24
54	149	NORTH ANDREWS GARDENS ELEM.	345 N.E. 56th St.	Fort Lauderdale	26-11-47	80-08-34	9.55	217.3	7	42	43	Anixter-Mark	P-25A24
55	74	ROCK ISLAND ELEM.	2301 N.W. 26th St.	Fort Lauderdale	26-09-31	80-10-26	6.31	217.7	9	33	35	Anixter-Mark	P-25A48
56	41	LARKDALE ELEM.	3250 N.W. 12th Pl.	Fort Lauderdale	26-08-22	80-11-23	4.66	217.7	7	58	60	Anixter-Mark	P-25A48G
57	23	DANDY, WILLIAM MIDDLE (Evergl)	2400 N.W. 26th St.	Fort Lauderdale	26-09-21	80-10-32	6.10	217.8	9	49	52	Anixter-Mark	P-25A72G
58	150	RICKARDS MIDDLE	5000 N. [illegible] Ave.	Oakland Park	26-12-05	80-08-01	10.17	218.7	7	77	80	Anixter-Mark	P-25A72G
59	107	NORTHEAST HIGH	700 N.E. 56th St.	Oakland Park	26-11-41	80-08-17	9.64	219.1	6	78	80	Anixter-Mark	P-25A48G
60	84	SOUTH PLANTATION HIGH	1300 [illegible] Way	Plantation	26-06-10	80-13-13	1.50	219.2	6	36	37	Anixter-Mark	P-25A24
61	151	LLOYD ESTATES ELEM.	750 N.W. 41st St.	Oakland Park	26-10-35	80-09-09	8.09	219.8	7	45	47	Anixter-Mark	P-25A48
62	0	PARKWAY MIDDLE	3600 N.W. [illegible] Ct.	Fort Laudrdale	26-07-37	80-11-43	3.78	221.9	7	72	74	Anixter-Mark	P-25A48G
63	152	MC NAB ELEM.	1350 S.E. 9th Ave.	Pompano Beach	26-12-50	80-06-31	11.83	222.0	7	78	80	Anixter-Mark	P-25A48G
64	106	FLORANADA ELEM.	5251 N.E. 14th Way	Fort Lauderdale	26-11-31	80-07-46	9.84	222.2	5	44	46	Anixter-Mark	P-25A48
65	153	DILLARD HIGH	2501 N.W. 11th St.	Fort Lauderdale	26-08-17	80-10-34	5.16	226.1	8	58	60	Anixter-Mark	P-25A48G
66	19	DILLARD ELEMENTARY	2365 N.W. 11th St.	Fort Lauderdale	26-08-23	80-10-27	5.32	226.1	8	58	60	Anixter-Mark	P-25A48G
67	77	KING, MARTIN L. ELEM.	591 N.W. 31 Ave.	Fort Lauderdale	26-07-40	80-11-16	4.14	226.2	7	58	60	Anixter-Mark	P-25A48G
68	154	OAKLAND PARK ELEM.	936 N.E. 33rd St.	Oakland Park	26-10-04	80-08-07	8.41	228.1	6	73	75	Anixter-Mark	P-25A48
69	99	WILTON MANORS ELEM.	2401 N.E. 3rd Ave.	Fort Lauderdale	26-09-26	80-08-38	7.53	229.5	8	56	58	Anixter-Mark	P-25A48
70	43	LAUDERDALE MANORS ELEM.	1400 N.W. 14th Ct.	Fort Lauderdale	26-08-33	80-09-42	6.03	229.9	6	40	42	Anixter-Mark	P-25A48
71	0	A1 (NEW SCHOOL)	N.W. 9th Ave. & 13th St.	Fort Lauderdale	26-08-28	80-09-14	6.35	233.4	8	58	60	Anixter-Mark	P-25A48G
72	88	SUNLAND PARK ELEM.	919 N.W. 13 Ave.	Fort Lauderdale	26-08-08	80-09-36	5.82	234.2	8	58	60	Anixter-Mark	P-25A48G
73	26	FORT LAUDERDALE HIGH	1600 N.E. 4th Ave.	Fort Lauderdale	26-08-53	80-08-23	7.34	234.5	6	65	68	Anixter-Mark	P-25A72G
74	64	PINE RIDGE CENTER	1251 S.W. 42nd Ave.	Fort Lauderdale	26-06-18	80-12-11	2.42	237.6	15	31	32	Anixter-Mark	P-25A24
75	6	BENNETT ELEM.	1755 N.E. 14th St.	Fort Lauderdale	26-08-40	80-07-26	8.04	240.0	8	45	48	Anixter-Mark	P-25A72G
76	89	SUNRISE MIDDLE	1750 N.E. 14th St.	Fort Lauderdale	26-08-36	80-07-23	8.05	240.7	8	47	50	Anixter-Mark	P-25A72G
77	52	NORTH FORK ELEM.	101 N.W. 15th Ave.	Fort Lauderdale	26-07-22	80-09-44	5.23	241.1	6	78	80	Anixter-Mark	P-25A48G
78	94	WALKER ELEM.	1001 N.W. 4th St.	Fort Lauderdale	26-07-33	80-09-19	5.71	241.4	6	58	60	Anixter-Mark	P-25A48G
79	98	WESTWOOD HEIGHTS ELEM.	2861 S.W. 9th St.	Fort Lauderdale	26-06-40	80-10-55	3.77	242.8	8	37	38	Anixter-Mark	P-25A24
80	5	BAYVIEW ELEM.	1175 Middle River Dr.	Fort Lauderdale	26-08-26	80-07-04	8.25	243.0	2	47	50	Anixter-Mark	P-25A72
81	155	SCHOOL BOARD ADMINISTRATION	1320 S.W. 4th St.	Fort Lauderdale	26-07-01	80-09-35	5.31	243.0	5	40	43	Anixter-Mark	P-25A72G
82	46	MEADOWBROOK ELEM.	2300 S.W. 46th Ave.	Fort Lauderdale	26-05-45	80-12-38	1.71	247.0	16	29	30	Conifer	PT-2521
83	87	STRANAHAN HIGH	1800 S.W. 5th Pl.	Fort Lauderdale	26-06-46	80-09-59	4.69	247.0	6	41	43	Andrew	P4F-25
84	73	RIVERLAND ELEM.	2600 S.W. 11th Ct.	Fort Lauderdale	26-06-32	80-10-33	4.05	247.2	7	68	70	Anixter-Mark	P-25A48G
85	110	SUNSET LEARNING CENTER	3775 S.W. 16th St.	Fort Lauderdale	26-06-02	80-11-51	2.58	247.4	10	29	30	Andrew	P2F-25
86	0	YOUNG, VIRGINIA ELEM.	1005 E. Broward Blvd.	Fort Lauderdale	26-07-21	80-07-59	6.87	248.6	6	58	60	Anixter-Mark	P-25A48G
87	0	WRIGHT, K.C. ADMIN. BLDG.	600 S.E. 3rd Avenue	Fort Lauderdale	26-06-51	80-08-24	6.26	251.8	8	176	178	Anixter-Mark	P-25A48G
88	78	SELKIRK COMMUNICATIONS CABLE	644 S. Andrews Ave.	Fort Lauderdale	26-06-47	80-08-33	6.08	252.1	6	38	40	Anixter-Mark	P-25A48
89	111	VOCATIONAL CENTER (SO. SIDE)	701 S. Andrews Ave.	Fort Lauderdale	26-06-43	80-08-39	5.96	252.5	6	64	66	Anixter-Mark	P-25A48
90	27	FOSTER, STEPHEN ELEM.	3471 S.W. 22nd St.	Fort Lauderdale	26-05-40	80-11-32	2.77	258.1	7	36	37	Anixter-Mark	P-25A24
91	32	HARBORDALE ELEM.	900 S.E. 15th St.	Fort Lauderdale	26-06-09	80-08-02	6.44	259.9	9	50	52	Anixter-Mark	P-25A48
92	16	CROISSANT PARK ELEM.	1800 S.W. 4th Ave.	Fort Lauderdale	26-05-53	80-08-45	5.88	261.6	8	58	60	Anixter-Mark	P-25A48G
93	50	NEW RIVER MIDDLE	3100 Riverland Road	Fort Lauderdale	26-05-28	80-11-13	3.06	263.5	8	41	42	Andrew	P2F-25
94	75	ROGERS MIDDLE	700 S.W. 20th St.	Fort Lauderdale	26-05-24	80-09-02	5.31	267.1	7	45	47	Anixter-Mark	P-25A48
95	22	EDGEWOOD ELEM.	1300 S.W. 32nd Ct.	Fort Lauderdale	26-05-02	80-09-30	4.82	271.9	6	41	44	Anixter-Mark	P-25A72G
96	156	MC FATTER VOC-TECH CENTER	6500 Nova Drive	Davie	26-05-06	80-13-50	0.32	280.4	5	23	24	Conifer	PT-2521
97	13	COLLINS ELEM.	1050 N.W. 2nd St.	Dania	26-03-21	80-09-04	5.67	291.6	8	45	47	Anixter-Mark	P-25A48G
98	17	DANIA ELEM.	300 S.E. 2nd Ave.	Dania	26-02-47	80-08-35	6.39	295.4	10	45	47	Jerrold-Taco	EPA-4
99	57	OLSEN MIDDLE	1301 S.E. 2nd Ave.	Dania	26-02-11	80-08-19	6.95	299.5	5	46	48	Anixter-Mark	P-25A48G
100	7	BETHUNE ELEM.	2400 Meade St.	Hollywood	26-02-39	80-09-17	5.81	299.8	5	24	26	Varian	AE-4
101	2	ATTUCKS MIDDLE	3500 N. 22nd Ave.	Hollywood	26-02-31	80-09-11	5.98	300.6	8	39	40	Anixter-Mark	P-25A24
102	82	SOUTH BROWARD HIGH	1901 N. Federal Hwy.	Hollywood	26-01-41	80-08-35	7.02	304.7	9	51	54	Anixter-Mark	P-25A72G
103	34	HOLLYWOOD CENTRAL ELEM.	1700 Monroe St.	Hollywood	26-00-26	80-08-32	7.96	313.0	7	55	58	Anixter-Mark	P-25A72G
104	56	OAKRIDGE ELEM.	1507 N. 28th Ave.	Hollywood	26-01-25	80-09-46	6.26	313.4	6	51	54	Jerrold-Taco	EPA-6
105	36	HOLLYWOOD HILLS HIGH	5400 Stirling Road	Hollywood	26-02-43	80-11-52	3.68	319.9	8	60	62	Anixter-Mark	P-25A48G

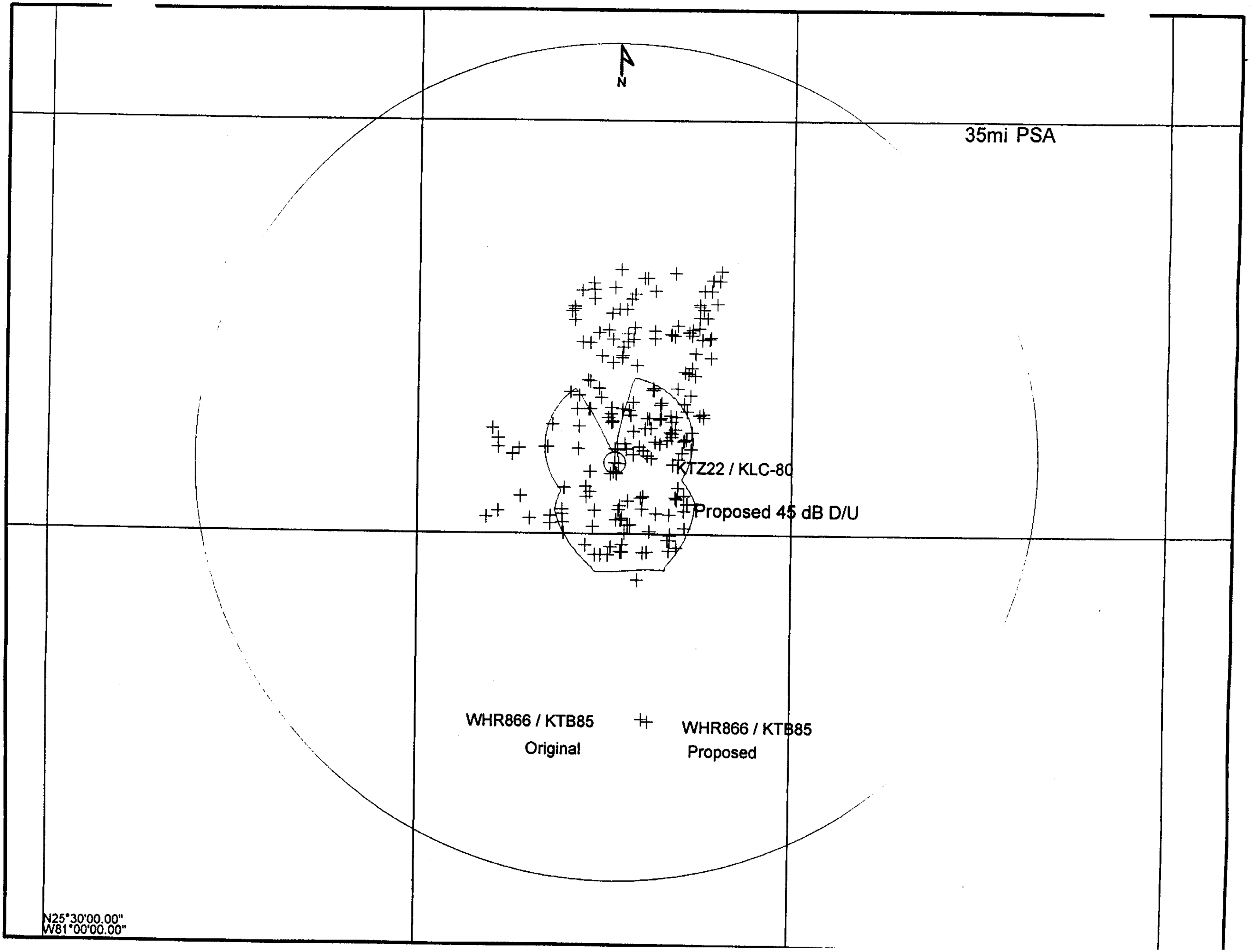
09/05/2001

BECON RECEIVE SITES

NEW FCC NO.	OLD FCC NO.	SCHOOL	ADDRESS	CITY	LAT	LONG	DIST	AZ	GROUND ELEV.	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
106	35	HOLLYWOOD HILLS ELEM.	3501 Taft St.	Hollywood	26-01-30	80-10-50	5.43	320.7	10	32	34	Anixter-Mark	P-25A48
107	12	COLBERT ELEM.	2701 Plunkett St.	Hollywood	26-00-00	80-09-41	7.52	322.0	10	43	46	Anixter-Mark	P-25A72G
108	101	MC NICOL MIDDLE	1411 S. 28th Ave.	Hollywood	25-59-54	80-09-42	7.58	322.6	9	41	44	Anixter-Mark	P-25A72G
109	85	STIRLING ELEM.	5500 Stirling Road	Hollywood	26-02-37	80-12-02	3.66	323.1	5	58	60	Anixter-Mark	P-25A48G
110	29	HALLANDALE ELEM.	[illegible]	Hallandale	25-59-02	80-09-10	8.70	323.7	10	68	70	Anixter-Mark	P-25A48G
111	30	HALLANDALE HIGH	720 N.W. 9th Ave.	Hallandale	25-59-35	80-09-43	7.86	324.4	10	54	57	Anixter-Mark	P-25A72G
112	157	SOUTH AREA ALTERNATIVE CTR.	[illegible] Court	Hallandale	25-59-35	80-09-53	7.76	325.4	10	56	58	Anixter-Mark	P-25A48
113	31	HALLANDALE ADULT/COMM CTR.	1000 S.W. 3rd St.	Hallandale	25-58-49	80-09-47	8.55	328.2	11	55	57	Jerrold-Taco	EPA-4
114	80	SHERIDAN HILLS ELEM.	5001 Thomas St.	Hollywood	26-01-50	80-11-56	4.46	329.0	10	58	60	Anixter-Mark	P-25A48
115	100	ORANGE BROOK ELEM.	715 S. 46th Ave.	Hollywood	26-00-13	80-11-20	6.39	332.8	10	58	60	Anixter-Mark	P-25A48
116	109	SHERIDAN VOC-TECH CENTER	5400 W. Sheridan St.	Hollywood	26-01-53	80-12-29	4.14	335.4	6	62	64	Anixter-Mark	P-25A48
117	40	LAKE FOREST ELEM.	3550 S.W. 48th Ave.	Hollywood	25-58-44	80-11-31	7.87	339.7	7	55	57	Andrew	P4F-25
118	108	QUEST CENTER	6401 Charleston St.	Hollywood	26-02-24	80-13-04	3.37	340.5	8	35	36	Andrew	P2F-25
119	95	WATKINS ELEM.	3601 S.W. 56th Ave.	Hollywood	25-58-40	80-11-51	7.83	342.3	7	64	66	Andrew	P4F-25
120	96	WEST HOLLYWOOD ELEM.	6301 Hollywood Blvd.	Hollywood	26-00-41	80-12-52	5.31	345.5	9	68	70	Anixter-Mark	P-25A48
121	102	MC ARTHUR HIGH	6501 Hollywood Blvd.	Hollywood	26-00-38	80-13-04	5.32	347.8	9	28	31	Anixter-Mark	P-25A72G
122	33	T.C.I. of SOUTH FLORIDA CABLE	[illegible]	North Miami	25-56-41	80-12-18	9.90	348.7	10	100	150	Andrew	P4F-25
123	0	NOVA EISENHOWER ELEM	6501 S.W. 39th St.	Davie	26-04-22	80-13-59	0.93	349.3	8	59	60	Anixter-Mark	P-25A24
124	60	PEMBROKE PINES ELEM.	6700 S.W. 9th St.	Pembroke Pines	26-00-06	80-13-19	5.68	351.5	7	23	25	Anixter-Mark	P-25A48
125	1	APOLLO MIDDLE	6800 Arthur St.	Hollywood	26-01-10	80-13-32	4.63	352.1	8	56	57	Conifer	PT-2521
126	54	NOVA BLANCHE FORMAN ELEM.	3521 Davie Road	Davie	26-04-27	80-14-02	0.81	352.6	8	59	60	Anixter-Mark	P-25A24
127	0	DRIFTWOOD MIDDLE	2751 N.W. 70th Terr.	Hollywood	26-02-04	80-13-44	3.58	353.1	6	39	40	Andrew	P2F-25
128	37	HOLLYWOOD PARK ELEM.	901 N. 69th Way	Hollywood	26-01-01	80-13-39	4.79	353.8	8	68	70	Anixter-Mark	P-25A48G
129	47	MIRAMAR ELEM.	6831 S.W. 26th St.	Miramar	25-59-15	80-13-30	6.82	354.3	8	68	70	Anixter-Mark	P-25A48G
130	81	SHERIDAN PARK ELEM.	2310 N. 70th Terr.	Hollywood	26-01-47	80-13-48	3.90	354.7	7	51	52	Anixter-Mark	P-25A24
131	61	PERRY, ANNABEL C. ELEM.	6850 S.W. 34th St.	Miramar	25-58-44	80-13-32	7.41	355.0	7	39	41	Anixter-Mark	P-25A48G
132	62	PERRY, HENRY D. MIDDLE	3400 Wildcat Way	Miramar	25-58-45	80-13-39	7.38	356.0	7	68	70	Anixter-Mark	P-25A48G
133	8	BOULEVARD HEIGHTS ELEM.	7201 Johnson St.	Hollywood	26-01-03	80-14-01	4.73	358.3	8	51	52	Anixter-Mark	P-25A24
134	91	SUNSHINE ELEM.	7737 W. LaSalle Blvd.	Miramar	25-59-05	80-14-25	6.98	2.3	6	77	80	Anixter-Mark	P-25A72G
135	24	FAIRWAY ELEM.	7850 Fairway Blvd.	Miramar	25-58-31	80-14-38	7.65	3.8	5	45	48	Anixter-Mark	P-25A72G
136	0	WHISPERING PINES SCHOOL	3609 S.W. 89th Ave.	Miramar	25-58-31	80-15-14	7.70	26.8	7	68	70	Anixter-Mark	P-25A48G
137	55	NOVA HIGH	3600 College Ave.	Davie	26-04-32	80-14-15	0.72	9.7	6	59	60	Anixter-Mark	P-25A24
138	48	MIRAMAR HIGH	3601 S.W. 89th Ave.	Miramar	25-58-31	80-15-41	7.79	11.8	7	34	37	Anixter-Mark	P-25A72G
139	66	PINES MIDDLE	200 N.W. Douglas Road	Pembroke Pines	26-00-32	80-15-52	5.61	18.5	6	35	36	Anixter-Mark	P-25A24
140	158	SEA CASTLE ELEM.	9600 Miramar Blvd.	Miramar	25-59-13	80-16-28	7.24	19.4	5	57	60	Anixter-Mark	P-25A72G
141	18	DAVIE ELEM.	7025 S.W. 39th St.	Davie	26-04-22	80-14-27	0.96	20.1	6	19	20	Conifer	PT-2521
142	58	PASADENA LAKES ELEM.	6601 Pasadena Blvd.	Pembroke Pines	26-01-43	80-15-45	4.26	22.8	4	68	70	Anixter-Mark	P-25A48G
143	0	PALM COVE ELEM	11601 S.W. 9th St.	Pembroke Pines	26-00-05	80-18-13	7.20	35.9	4	77	80	Anixter-Mark	P-25A72G
144	15	COOPER CITY HIGH	9401 Stirling Road	Cooper City	26-02-42	80-16-25	3.68	39.7	5	45	46	Anixter-Mark	P-25A24
145	67	PIONEER MIDDLE	5350 S.W. 90th Ave.	Cooper City	26-03-03	80-16-07	3.17	40.0	5	45	46	Conifer	PT-2521
146	65	PINES LAKES ELEM.	10300 Johnson St.	Pembroke Pines	26-00-51	80-18-17	6.55	40.9	5	52	55	Anixter-Mark	P-25A72G
147	59	PEMBROKE LAKES ELEM.	11251 Taft St.	Pembroke Pines	26-01-28	80-18-20	6.07	45.6	4	36	37	Anixter-Mark	P-25A24
148	0	YOUNG, WALTER C. RES. CENTER	901 N.W. 129th Ave.	Pembroke Pines	26-00-45	80-19-18	[illegible]	[illegible]	5	55	57	Anixter-Mark	P-25A48G
149	0	EMBASSY CREEK ELEM	10905 S.E. Lake Blvd.	Cooper City	26-01-47	80-18-20	5.82	48.2	4	58	60	Anixter-Mark	P-25A48G
150	14	COOPER CITY ELEM.	5080 S.W. 92nd Ave.	Cooper City	26-03-26	80-16-29	3.09	50.0	7	45	46	Andrew	P2F-25
151	28	GRIFFIN ELEM.	5050 S.W. 116th Ave.	Cooper City	26-03-21	80-18-11	4.67	63.5	6	41	42	Anixter-Mark	P-25A24
152	162	SILVER RIDGE ELEM.	9100 S.W. 36th St.	Davie	26-04-30	80-16-07	2.18	69.4	4	67	70	Anixter-Mark	P-25A72G
153	159	HAWKES BLUFF ELEM.	5900 S.W. 160th Ave.	Fort Lauderdale	26-02-43	80-21-41	8.30	70.2	6	67	70	Anixter-Mark	P-25A72G
154	160	COUNTRY ISLES ELEM.	2300 Country Isle Road	Fort Lauderdale	26-05-45	80-22-21	8.53	[illegible]	6	68	70	Anixter-Mark	P-25A48G
155	161	TEQUESTA TRACE MIDDLE	1800 Indian Trace	Fort Lauderdale	26-06-16	80-23-29	9.76	97.4	6	46	48	Anixter-Mark	P-25A48G
156	0	GULF & PACIFIC COMMUNICATIONS	1274 Weston Rd.	Weston	26-06-11	80-24-49	[illegible]	98.1	6	69	70	Conifer	PT-2521
157	0	INDIAN TRACE ELEM	400 Indian Trace	Fort Lauderdale	26-06-54	80-23-31	9.91	101.6	6	57	60	Anixter-Mark	P-25A72G
158	97	WESTERN HIGH	1200 S.W. 136th Ave.	Fort Lauderdale	26-06-17	80-19-45	5.95	102.5	8	67	68	Anixter-Mark	P-25A24

BECON RECEIVE SITES

NEW FCC NO.	OLD FCC NO.	SCHOOL	ADDRESS	CITY	LAT	LONG	DIST	AZ	GROUND ELEV.	RCAGL	STRUCTURE HEIGHT AGL	MANUFACTURER	MODEL
159	25	FLAMINGO ELEM.	1130 S.W. 133rd Ave.	Davie	26-06-17	80-19-32	5.73	103.0	8	35	36	Anixter-Mark	P-25A24
160	0	SAWGRASS ELEM.	[illegible] N. New River Drive	Sunrise	[illegible]	80-19-09	6.06	121.2	6	58	60	Anixter-Mark	P-25A48G
161	163	CENTRAL PARK ELEM.	777 N. Nob Hill Road	Plantation	26-07-47	80-17-01	4.22	135.3	8	57	60	Anixter-Mark	P-25A72G
162	51	NOB HILL ELEM.	2100 N.W. 104th Ave.	Sunrise	26-09-03	80-17-12	5.46	144.6	6	39	40	Jerrold-Taco	EPA-2
163	164	SANDPIPER ELEM.	3700 Hiatus Road	Sunrise	26-10-18	80-17-44	6.96	147.8	11	68	70	Anixter-Mark	P-25A48G
164	0	WELLEBY ELEM.	[illegible] Nob Hill Road	Sunrise	26-10-03	80-17-02	6.35	151.9	10	68	70	Anixter-Mark	P-25A48G
165	3	BAIR MIDDLE	9100 N.W. 21st Manor	Sunrise	26-09-03	80-16-15	4.96	154.0	7	41	42	Varian	AE-2
166	38	HORIZON ELEM.	[illegible] Road	Sunrise	26-09-04	80-16-09	4.93	155.1	7	37	38	Anixter-Mark	P-25A24
167	0	WESTPINE MIDDLE	9393 N.W. 50th St.	Sunrise	26-11-11	80-16-20	7.26	161.8	10	46	48	Anixter-Mark	P-25A48G
168	4	BANYAN ELEM.	[illegible] N.W. 50th St.	Sunrise	26-11-07	80-16-09	7.13	163.1	10	49	50	Jerrold-Taco	EPA-2
169	165	WESTCHESTER ELEM.	12405 Royal Palm Blvd.	Coral Springs	26-15-35	80-17-26	12.43	164.1	10	50	52	Andrew	P4F-25
170	166	RIVERSIDE ELEM.	[illegible] Drive	Coral Springs	[illegible]	[illegible]	10.44	[illegible]	9	68	70	Anixter-Mark	P-25A48G
171	168	CORAL SPRINGS ELEM.	3601 N.W. 110th Ave.	Coral Springs	26-16-23	80-17-27	13.32	165.1	11	49	51	Anixter-Mark	P-25A48
172	0	CABLE TV OF CORAL SPRINGS	[illegible]	Coral Springs	[illegible]	[illegible]	[illegible]	165.2	13	100	120	Conifer	PT-2521
173	68	PIPER HIGH	8000 N.W. 44th St.	Sunrise	26-10-36	80-15-26	6.37	168.0	9	61	63	Anixter-Mark	P-25A48G
174	167	TARAVELLA HIGH	[illegible] Drive	Coral Springs	[illegible]	80-16-11	10.26	168.1	10	52	53	Anixter-Mark	P-25A24
175	49	MIRROR LAKE ELEM.	1200 N.W. 72nd Ave.	Plantation	26-08-25	80-14-41	3.77	171.6	8	39	40	Anixter-Mark	P-25A24
176	170	CORAL SPRINGS MIDDLE	[illegible] Road	Coral Springs	[illegible]	80-15-53	13.88	172.6	16	49	52	Anixter-Mark	P-25A72G
177	171	COUNTRY HILLS ELEM.	10550 Westview Drive	Coral Springs	26-17-50	80-15-54	14.65	172.9	12	58	60	Anixter-Mark	P-25A48G
178	169	STONEMAN DOUGLAS HIGH	5901 Pine Island Road	Parkland	26-18-18	80-15-58	15.18	172.9	12	65	67	Anixter-Mark	P-25A48G
179	172	TAMARAC ELEM.	7601 University Dr.	Tamarac	26-12-58	80-15-13	9.02	173.0	11	35	37	Anixter-Mark	P-25A48
180	173	MAPLEWOOD ELEM.	[illegible] Ramblewood Dr.	Coral Springs	[illegible]	80-15-25	10.96	173.1	12	60	61	Anixter-Mark	P-25A24
181	63	PETERS ELEM.	851 N.W. 68th Ave.	Plantation	26-08-04	80-14-24	3.34	175.5	7	58	60	Anixter-Mark	P-25A48G
182	70	PLANTATION HIGH	6901 N.W. [illegible] St.	Plantation	26-08-41	80-14-27	4.05	175.6	8	35	37	Anixter-Mark	P-25A48
183	93	VILLAGE ELEM.	2100 N.W. 70th Ave.	Sunrise	26-09-09	80-14-25	4.58	176.5	8	54	56	Anixter-Mark	P-25A48
184	71	PLANTATION MIDDLE	6600 W. Sunrise Blvd.	Plantation	26-08-10	80-14-19	3.45	177.1	7	59	60	Conifer	PT-2521
185	174	RAMBLEWOOD ELEM.	8950 Shadowwood Blvd.	Coral Springs	26-14-51	80-14-41	11.12	177.1	12	50	52	Andrew	P4F-25
186	176	FOREST HILLS ELEM.	3100 N.W. 85th Ave.	Coral Springs	26-16-05	80-14-27	12.53	178.6	13	44	47	Anixter-Mark	P-25A72G
187	175	PINEWOOD ELEM.	1600 S.W. 83rd Ave.	North Lauderdale\	26-12-28	80-14-20	8.38	178.7	10	59	60	Anixter-Mark	P-25A24
188	177	RAMBLEWOOD MIDDLE	8505 W. Atlantic Blvd.	Coral Springs	26-14-10	80-14-21	10.33	178.8	11	51	52	Andrew	P2F-25
189	178	CORAL PARK ELEM.	8401 Westview Drive	Coral Springs	26-17-59	80-14-14	14.70	179.7	13	78	80	Anixter-Mark	P-25A48G
81A	0	FORT LAUDERDALE POLICE DEPT	1300 W. Broward Blvd.	Fort Lauderdale	26-07-18	80-09-35	5.31	242.8	5	100	300	Andrew	P4F-25
FUTURE		EE MIDDLE SCHOOL	Sample Rd. @ NW 124th Ave	Coral Springs	26-16-15	80-17-41	13.26	163.9	0	0	0	Andrew	FUTURE
FUTURE		SILVER TRAIL MIDDLE	Sheridan @ NW 184th Ave	Pembroke Pines	26-01-38	80-23-29	10.49	87.5	0	0	0	Andrew	FUTURE
FUTURE		INDIAN RIDGE MIDDLE	Nob Hill Rd. @ SW 14th St	Davie	26-06-11	80-17-04	3.26	111.3	0	0	0	Andrew	FUTURE
FUTURE		CHAPEL TRAIL ELEM	Taft St. @ NW 196th Ave.	Pembroke Pines	[illegible]	80-24-26	14.59	67.1	0	0	64	Anixter-Mark	P-25A48G
FUTURE		EAGLE TRACE ELEM	Indian Trace @ I-595	Weston	26-07-37	80-23-58	10.58	105.6	0	0	64	Anixter-Mark	P-25A48G
FUTURE		I-91	Johnson Rd./ Winston Pk.	Coconut Creek	26-18-39	80-11-53	15.66	188.6	0	0	0	Andrew	FUTURE
FUTURE		SILVER PALMS ELEM	I-75 @ Pines Blvd	Pembroke Pines	26-01-07	80-20-55	8.42	56.7	0	0	0	Andrew	FUTURE
FUTURE		EAGLE RIDGE ELEM	Coral Spr. Dr. @ W. View	Coral Springs	26-17-46	80-16-53	14.75	168.9	0	0	0	Andrew	FUTURE
FUTURE		FLANAGAN HIGH SCHOOL	12800 Taft Street	Pembroke Pines	26-01-18	80-19-17	6.93	50.4	0	0	0	Andrew	FUTURE
FUTURE		TECHNICAL SUPPORT SERVICES	7720 W. Oakland Park Blvd.	Sunrise	26-09-53	80-15-15	5.55	166.0	8	30	30	Andrew	FUTURE


N
35mi PSA
KTZ22 / KLC-80
Proposed 45 dB D/U
WHR866 / KTB85
Original
WHR866 / KTB85
Proposed
N25°30'00.00"
W81°00'00.00"

Rec. Site No.		Receive Site Coordinates North Latitude.				West Longitude				AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	1	26	6	10	N	80	14	7	W	0.8	352.8	1.2	23.0	28.0	31.0	106.3	132.1	20.0	-3.9	-58.3	-105.0	46.7	
R	2	26	16	23	N	80	13	52	W	1.2	355.7	12.9	34.7	28.0	31.0	127.1	135.7	20.0	-1.0	-79.1	-105.8	26.6	*
R	3	26	19	17	N	80	13	45	W	1.4	356.2	16.2	38.0	28.0	30.9	129.1	136.5	20.0	-1.0	-81.1	-106.6	25.5	*
R	3	26	19	17	N	80	13	45	W	1.4	356.2	16.2	38.0	28.0	30.9	129.1	136.5	31.4	-3.6	-69.7	-109.2	39.5	*
R	4	26	12	50	N	80	13	37	W	3.5	355.6	8.8	30.6	28.0	31.0	123.8	134.6	20.0	-2.6	-75.8	-106.3	30.4	*
R	5	26	12	59	N	80	13	35	W	3.6	355.7	9.0	30.8	28.0	31.0	124.0	134.7	20.0	-2.6	-76.0	-106.3	30.3	*
R	5	26	12	59	N	80	13	35	W	3.6	355.7	9.0	30.8	28.0	31.0	124.0	134.7	21.4	-8.6	-74.6	-112.3	37.7	*
R	6	26	13	37	N	80	13	31	W	3.7	355.9	9.7	31.5	28.0	31.0	124.7	134.9	20.0	-2.6	-76.7	-106.5	29.8	*
R	6	26	13	37	N	80	13	31	W	3.7	355.9	9.7	31.5	28.0	31.0	124.7	134.9	27.9	-7.1	-68.8	-111.0	42.2	*
R	7	26	16	23	N	80	13	14	W	4.1	356.8	12.9	34.7	28.0	30.9	127.1	135.7	20.0	-2.6	-79.1	-107.4	28.2	*
R	7	26	16	23	N	80	13	14	W	4.1	356.8	12.9	34.7	28.0	30.9	127.1	135.7	27.9	-7.1	-71.2	-111.9	40.6	*
R	8	26	17	8	N	80	12	53	W	5.4	357.4	13.8	35.5	28.0	30.9	127.7	135.9	20.0	-2.6	-79.7	-107.6	27.9	*
R	8	26	17	8	N	80	12	53	W	5.4	357.4	13.8	35.5	28.0	30.9	127.7	135.9	28.0	-7.1	-71.7	-112.1	40.4	*
R	9	26	14	0	N	80	13	10	W	5.6	356.6	10.2	31.9	28.0	30.9	125.1	135.0	20.0	-5.0	-77.1	-109.1	32.0	*
R	9	26	14	0	N	80	13	10	W	5.6	356.6	10.2	31.9	28.0	30.9	125.1	135.0	21.4	-5.0	-75.7	-109.1	33.4	*
R	10	26	17	30	N	80	12	36	W	6.4	357.9	14.3	35.9	28.0	30.9	128.0	136.0	20.0	-3.9	-80.0	-109.0	29.0	*
R	10	26	17	30	N	80	12	36	W	6.4	357.9	14.3	35.9	28.0	30.9	128.0	136.0	31.4	-3.6	-68.6	-108.7	40.1	*
R	11	26	15	2	N	80	12	37	W	7.9	357.7	11.5	33.1	28.0	30.9	126.1	135.3	20.0	-5.0	-78.1	-109.4	31.3	*
R	11	26	15	2	N	80	12	37	W	7.9	357.7	11.5	33.1	28.0	30.9	126.1	135.3	21.4	-8.6	-76.7	-113.0	36.3	*
R	12	26	9	3	N	80	13	32	W	7.9	355.0	4.5	26.3	28.0	31.0	118.0	133.3	20.0	-7.8	-70.0	-110.1	40.1	*
R	13	26	14	10	N	80	12	42	W	8.1	357.5	10.5	32.1	28.0	30.9	125.3	135.0	20.0	-5.0	-77.3	-109.1	31.9	*
R	13	26	14	10	N	80	12	42	W	8.1	357.5	10.5	32.1	28.0	30.9	125.3	135.0	21.4	-8.6	-75.9	-112.7	36.9	*
R	14	26	18	40	N	80	11	37	W	9.5	359.5	15.7	37.2	28.0	30.8	128.8	136.3	20.0	-5.0	-80.8	-110.5	29.7	*
R	14	26	18	40	N	80	11	37	W	9.5	359.5	15.7	37.2	28.0	30.8	128.8	136.3	31.4	-3.6	-69.4	-109.1	39.7	*
R	15	26	12	17	N	80	12	25	W	12.2	357.9	8.4	29.9	28.0	30.9	123.4	134.4	20.0	-13.3	-75.4	-116.8	41.4	*
R	15	26	12	17	N	80	12	25	W	12.2	357.9	8.4	29.9	28.0	30.9	123.4	134.4	21.4	-8.6	-74.0	-112.1	38.2	*
R	16	26	6	6	N	80	13	55	W	11.6	353.3	1.1	22.9	28.0	31.0	105.8	132.1	20.0	-16.0	-57.8	-117.1	59.3	

Rec.		Receive Site														Path Loss		Receive		Signal		Total	
Site		Coordinates								AZ from Tx		Dist to Tx		EIRP		Free Space		Antenna Gain		Level		D/U	
No.		North Latitude.				West Longitude				"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	17	26	17	44	N	80	11	1	W	12.5	0.5	14.8	36.2	28.0	30.7	128.3	136.1	20.0	-7.8	-80.3	-113.1	32.8	*
R	17	26	17	44	N	80	11	1	W	12.5	0.5	14.8	36.2	28.0	30.7	128.3	136.1	28.0	-8.0	-72.3	-113.4	41.1	*
R	18	26	14	34	N	80	11	33	W	13.9	359.6	11.1	32.5	28.0	30.8	125.8	135.1	20.0	-13.3	-77.8	-117.6	39.8	*
R	19	26	8	56	N	80	13	1	W	14.9	356.2	4.5	26.1	28.0	30.9	118.0	133.2	20.0	-16.0	-70.0	-118.3	48.4	
R	20	26	14	47	N	80	11	1	W	16.2	0.6	11.5	32.8	28.0	30.7	126.1	135.2	20.0	-16.0	-78.1	-120.5	42.4	*
R	21	26	9	33	N	80	12	42	W	16.3	357.0	5.3	26.8	28.0	30.9	119.3	133.5	20.0	-16.0	-71.3	-118.5	47.2	
R	21	26	9	33	N	80	12	42	W	16.3	357.0	5.3	26.8	28.0	30.9	119.3	133.5	21.8	-8.6	-69.5	-111.1	41.6	*
R	22	26	19	1	N	80	9	23	W	17.1	3.1	16.7	37.7	28.0	30.5	129.3	136.4	20.0	-13.3	-81.3	-119.2	37.9	*
R	22	26	19	1	N	80	9	23	W	17.1	3.1	16.7	37.7	28.0	30.5	129.3	136.4	28.0	-10.0	-73.3	-116.0	42.6	*
R	23	26	14	13	N	80	11	1	W	17.2	0.6	10.9	32.1	28.0	30.7	125.6	135.0	20.0	-16.0	-77.6	-120.3	42.7	*
R	23	26	14	13	N	80	11	1	W	17.2	0.6	10.9	32.1	28.0	30.7	125.6	135.0	21.8	-8.6	-75.8	-112.9	37.1	*
R	24	26	8	36	N	80	12	53	W	18.0	356.4	4.2	25.7	28.0	30.9	117.3	133.1	20.0	-16.0	-69.3	-118.2	48.9	
R	24	26	8	36	N	80	12	53	W	18.0	356.4	4.2	25.7	28.0	30.9	117.3	133.1	21.8	-8.6	-67.5	-110.8	43.3	*
R	25	26	14	31	N	80	9	43	W	23.0	2.9	11.7	32.5	28.0	30.5	126.3	135.1	20.0	-16.0	-78.3	-120.6	42.3	*
R	25	26	14	31	N	80	9	43	W	23.0	2.9	11.7	32.5	28.0	30.5	126.3	135.1	21.8	-8.6	-76.5	-113.2	36.7	*
R	26	26	14	33	N	80	9	40	W	23.1	3.0	11.7	32.5	28.0	30.5	126.3	135.1	20.0	-16.0	-78.3	-120.7	42.4	*
R	26	26	14	33	N	80	9	40	W	23.1	3.0	11.7	32.5	28.0	30.5	126.3	135.1	28.0	-10.0	-70.3	-114.7	44.4	*
R	27	26	15	11	N	80	9	10	W	24.0	3.9	12.6	33.3	28.0	30.5	126.9	135.3	20.0	-16.0	-78.9	-120.9	42.0	*
R	28	26	14	25	N	80	9	25	W	24.6	3.5	11.7	32.4	28.0	30.5	126.3	135.1	20.0	-16.0	-78.3	-120.6	42.4	*
R	28	26	14	25	N	80	9	25	W	24.6	3.5	11.7	32.4	28.0	30.5	126.3	135.1	28.0	-8.6	-70.3	-113.2	43.0	*
R	29	26	17	45	N	80	7	5	W	26.7	6.9	16.2	36.4	28.0	30.2	129.1	136.1	20.0	-16.0	-81.1	-121.9	40.9	*
R	29	26	17	45	N	80	7	5	W	26.7	6.9	16.2	36.4	28.0	30.2	129.1	136.1	31.4	-3.6	-69.7	-109.5	39.9	*
R	30	26	10	36	N	80	11	5	W	26.7	0.5	7.0	27.9	28.0	30.7	121.8	133.8	20.0	-16.0	-73.8	-119.1	45.3	
R	31	26	10	27	N	80	11	8	W	27.0	0.4	6.8	27.8	28.0	30.7	121.6	133.8	20.0	-16.0	-73.6	-119.1	45.5	
R	31	26	10	27	N	80	11	8	W	27.0	0.4	6.8	27.8	28.0	30.7	121.6	133.8	28.0	-13.5	-65.6	-116.6	51.0	
R	32	26	16	44	N	80	7	27	W	27.4	6.5	15.0	35.2	28.0	30.2	128.4	135.8	20.0	-16.0	-80.4	-121.7	41.2	*
R	32	26	16	44	N	80	7	27	W	27.4	6.5	15.0	35.2	28.0	30.2	128.4	135.8	31.4	-3.6	-69.0	-109.3	40.2	*

Rec.		Receive Site														Path Loss		Receive		Signal		Total	
Site		Coordinates								AZ from Tx		Dist to Tx		EIRP		Free Space		Antenna Gain		Level		D/U	
No.		North Latitude.				West Longitude				"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	33	26	18	31	N	80	6	24	W	27.5	7.8	17.3	37.4	28.0	30.1	129.7	136.4	20.0	-16.0	-81.7	-122.3	40.6	*
R	33	26	18	31	N	80	6	24	W	27.5	7.8	17.3	37.4	28.0	30.1	129.7	136.4	27.9	-7.1	-73.8	-113.4	39.6	*
R	34	26	6	32	N	80	13	20	W	27.5	354.9	1.8	23.4	28.0	31.0	110.0	132.3	20.0	-16.0	-62.0	-117.3	55.3	
R	34	26	6	32	N	80	13	20	W	27.5	354.9	1.8	23.4	28.0	31.0	110.0	132.3	28.0	-14.0	-54.0	-115.3	61.3	
R	35	26	16	33	N	80	7	26	W	27.8	6.6	14.8	35.0	28.0	30.2	128.3	135.8	20.0	-16.0	-80.3	-121.6	41.3	*
R	36	26	10	26	N	80	11	2	W	27.8	0.6	6.9	27.8	28.0	30.7	121.6	133.8	20.0	-16.0	-73.6	-119.1	45.4	
R	37	26	19	10	N	80	5	44	W	28.3	8.7	18.3	38.2	28.0	30.0	130.1	136.6	20.0	-16.0	-82.1	-122.6	40.4	*
R	38	26	17	44	N	80	6	31	W	28.5	7.8	16.5	36.5	28.0	30.1	129.2	136.1	20.0	-16.0	-81.2	-122.1	40.8	*
R	39	26	14	41	N	80	8	16	W	28.9	5.5	12.5	32.8	28.0	30.3	126.8	135.2	20.0	-16.0	-78.8	-120.9	42.1	*
R	40	26	18	29	N	80	5	52	W	29.1	8.7	17.5	37.5	28.0	30.0	129.8	136.4	20.0	-16.0	-81.8	-122.4	40.6	*
R	40	26	18	29	N	80	5	52	W	29.1	8.7	17.5	37.5	28.0	30.0	129.8	136.4	31.4	-3.6	-70.4	-110.0	39.6	*
R	41	26	16	21	N	80	7	7	W	29.4	7.2	14.8	34.8	28.0	30.1	128.3	135.7	20.0	-16.0	-80.3	-121.7	41.4	*
R	41	26	16	21	N	80	7	7	W	29.4	7.2	14.8	34.8	28.0	30.1	128.3	135.7	28.0	-11.0	-72.3	-116.7	44.4	*
R	42	26	15	46	N	80	7	27	W	29.5	6.8	14.0	34.1	28.0	30.2	127.8	135.6	20.0	-16.0	-79.8	-121.4	41.6	*
R	42	26	15	46	N	80	7	27	W	29.5	6.8	14.0	34.1	28.0	30.2	127.8	135.6	21.4	-12.4	-78.4	-117.8	39.4	*
R	43	26	14	52	N	80	8	0	W	29.6	6.0	12.8	33.0	28.0	30.3	127.1	135.3	20.0	-16.0	-79.1	-121.0	41.9	*
R	43	26	14	52	N	80	8	0	W	29.6	6.0	12.8	33.0	28.0	30.3	127.1	135.3	31.4	-3.6	-67.7	-108.6	40.9	*
R	44	26	14	27	N	80	8	3	W	30.5	6.0	12.4	32.6	28.0	30.3	126.8	135.2	20.0	-16.0	-78.8	-120.9	42.1	*
R	44	26	14	27	N	80	8	3	W	30.5	6.0	12.4	32.6	28.0	30.3	126.8	135.2	28.0	-13.0	-70.8	-117.9	47.1	
R	45	26	7	25	N	80	12	39	W	30.5	356.8	3.0	24.3	28.0	30.9	114.5	132.6	20.0	-16.0	-66.5	-117.7	51.2	
R	45	26	7	25	N	80	12	39	W	30.5	356.8	3.0	24.3	28.0	30.9	114.5	132.6	21.4	-10.3	-65.1	-112.0	46.9	
R	46	26	14	59	N	80	7	28	W	31.4	6.9	13.2	33.2	28.0	30.2	127.3	135.3	20.0	-16.0	-79.3	-121.1	41.8	*
R	47	26	15	45	N	80	6	49	W	31.8	7.8	14.3	34.2	28.0	30.1	128.0	135.6	20.0	-16.0	-80.0	-121.5	41.5	*
R	47	26	15	45	N	80	6	49	W	31.8	7.8	14.3	34.2	28.0	30.1	128.0	135.6	28.0	-13.2	-72.0	-118.7	46.7	
R	48	26	16	48	N	80	6	4	W	31.9	8.8	15.8	35.5	28.0	30.0	128.9	135.9	20.0	-16.0	-80.9	-121.9	41.1	*
R	48	26	16	48	N	80	6	4	W	31.9	8.8	15.8	35.5	28.0	30.0	128.9	135.9	28.0	-13.2	-72.9	-119.1	46.3	
R	49	26	14	9	N	80	7	13	W	34.6	7.6	12.6	32.3	28.0	30.1	126.9	135.1	20.0	-16.0	-78.9	-121.0	42.1	*

Rec. Site No.		Receive Site Coordinates North Latitude.				Receive Site Coordinates West Longitude				AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	49	26	14	9	N	80	7	13	W	34.6	7.6	12.6	32.3	28.0	30.1	126.9	135.1	21.4	-9.9	-77.5	-114.9	37.4	*
R	50	26	13	9	N	80	7	45	W	35.6	6.8	11.3	31.1	28.0	30.2	126.0	134.8	20.0	-16.0	-78.0	-120.6	42.6	*
R	50	26	13	9	N	80	7	45	W	35.6	6.8	11.3	31.1	28.0	30.2	126.0	134.8	31.4	-3.6	-66.6	-108.2	41.6	*
R	51	26	8	22	N	80	11	33	W	35.8	359.5	4.6	25.4	28.0	30.8	118.1	133.0	20.0	-16.0	-70.1	-118.2	48.1	
R	51	26	8	22	N	80	11	33	W	35.8	359.5	4.6	25.4	28.0	30.8	118.1	133.0	31.4	-5.6	-58.7	-107.8	49.1	
R	52	26	14	18	N	80	6	32	W	36.7	8.8	13.1	32.6	28.0	30.0	127.3	135.2	20.0	-16.0	-79.3	-121.2	41.9	*
R	52	26	14	18	N	80	6	32	W	36.7	8.8	13.1	32.6	28.0	30.0	127.3	135.2	31.4	-14.0	-67.9	-119.2	51.3	
R	53	26	14	11	N	80	6	38	W	36.7	8.6	12.9	32.4	28.0	30.0	127.1	135.1	20.0	-16.0	-79.1	-121.1	42.0	*
R	53	26	14	11	N	80	6	38	W	36.7	8.6	12.9	32.4	28.0	30.0	127.1	135.1	21.4	-9.9	-77.7	-115.0	37.3	*
R	54	26	11	47	N	80	8	34	W	37.0	5.6	9.5	29.4	28.0	30.3	124.5	134.3	20.0	-16.0	-76.5	-120.0	43.5	*
R	54	26	11	47	N	80	8	34	W	37.0	5.6	9.5	29.4	28.0	30.3	124.5	134.3	21.4	-10.3	-75.1	-114.3	39.2	*
R	55	26	9	31	N	80	10	26	W	37.3	2.0	6.3	26.7	28.0	30.6	120.9	133.4	20.0	-16.0	-72.9	-118.8	45.9	
R	56	26	8	22	N	80	11	23	W	37.5	359.9	4.7	25.4	28.0	30.8	118.3	133.0	20.0	-16.0	-70.3	-118.2	47.9	
R	56	26	8	22	N	80	11	23	W	37.5	359.9	4.7	25.4	28.0	30.8	118.3	133.0	28.0	-14.0	-62.3	-116.2	53.9	
R	57	26	9	21	N	80	10	32	W	37.6	1.8	6.1	26.5	28.0	30.6	120.6	133.4	20.0	-16.0	-72.6	-118.7	46.1	
R	57	26	9	21	N	80	10	32	W	37.6	1.8	6.1	26.5	28.0	30.6	120.6	133.4	31.4	-10.6	-61.2	-113.3	52.1	
R	58	26	12	5	N	80	8	1	W	38.4	6.6	10.2	29.8	28.0	30.2	125.0	134.4	20.0	-16.0	-77.0	-120.2	43.2	*
R	58	26	12	5	N	80	8	1	W	38.4	6.6	10.2	29.8	28.0	30.2	125.0	134.4	31.4	-9.1	-65.6	-113.3	47.7	
R	59	26	11	41	N	80	8	17	W	38.8	6.2	9.6	29.4	28.0	30.2	124.6	134.3	20.0	-16.0	-76.6	-120.1	43.5	*
R	59	26	11	41	N	80	8	17	W	38.8	6.2	9.6	29.4	28.0	30.2	124.6	134.3	28.0	-14.0	-68.6	-118.1	49.5	
R	60	26	6	10	N	80	13	13	W	39.0	355.1	1.5	22.9	28.0	31.0	108.4	132.1	20.0	-16.0	-60.4	-117.2	56.7	
R	60	26	6	10	N	80	13	13	W	39.0	355.1	1.5	22.9	28.0	31.0	108.4	132.1	21.4	-12.6	-59.0	-113.8	54.7	
R	61	26	10	35	N	80	9	9	W	39.5	4.6	8.1	28.0	28.0	30.4	123.1	133.8	20.0	-16.0	-75.1	-119.5	44.4	*
R	62	26	7	37	N	80	11	43	W	41.4	359.1	3.8	24.5	28.0	30.8	116.4	132.7	20.0	-16.0	-68.4	-117.9	49.5	
R	62	26	7	37	N	80	11	43	W	41.4	359.1	3.8	24.5	28.0	30.8	116.4	132.7	28.0	-14.0	-60.4	-115.9	55.5	
R	63	26	12	50	N	80	6	31	W	41.7	9.3	11.8	30.9	28.0	29.9	126.4	134.7	20.0	-16.0	-78.4	-120.8	42.5	*
R	63	26	12	50	N	80	6	31	W	41.7	9.3	11.8	30.9	28.0	29.9	126.4	134.7	28.0	-14.0	-70.4	-118.8	48.5	
R	64	26	11	31	N	80	7	46	W	42.0	7.2	9.8	29.2	28.0	30.1	124.8	134.2	20.0	-16.0	-76.8	-120.1	43.4	*

Rec. Site No.		Receive Site Coordinates North Latitude.				West Longitude				AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	65	26	8	17	N	80	10	34	W	45.7	1.8	5.1	25.3	28.0	30.6	119.1	133.0	20.0	-16.0	-71.1	-118.3	47.2	
R	65	26	8	17	N	80	10	34	W	45.7	1.8	5.1	25.3	28.0	30.6	119.1	133.0	28.0	-14.0	-63.1	-116.3	53.2	
R	66	26	8	23	N	80	10	27	W	45.7	2.1	5.3	25.4	28.0	30.5	119.4	133.0	20.0	-16.0	-71.4	-118.5	47.0	
R	66	26	8	23	N	80	10	27	W	45.7	2.1	5.3	25.4	28.0	30.5	119.4	133.0	28.0	-14.0	-63.4	-116.5	53.0	
R	67	26	7	40	N	80	11	16	W	45.7	0.2	4.1	24.6	28.0	30.7	117.2	132.7	20.0	-16.0	-69.2	-118.0	48.8	
R	67	26	7	40	N	80	11	16	W	45.7	0.2	4.1	24.6	28.0	30.7	117.2	132.7	28.0	-14.0	-61.2	-116.0	54.8	
R	68	26	10	4	N	80	8	7	W	47.7	6.9	8.4	27.5	28.0	30.2	123.4	133.7	20.0	-16.0	-75.4	-119.5	44.1	*
R	69	26	9	26	N	80	8	38	W	49.1	6.0	7.5	26.7	28.0	30.3	122.4	133.4	20.0	-16.0	-74.4	-119.2	44.8	*
R	70	26	8	33	N	80	9	42	W	49.5	3.8	6.0	25.6	28.0	30.5	120.5	133.1	20.0	-16.0	-72.5	-118.6	46.1	
R	71	26	8	28	N	80	9	14	W	53.0	4.9	6.3	25.6	28.0	30.4	120.9	133.1	20.0	-16.0	-72.9	-118.7	45.8	
R	71	26	8	28	N	80	9	14	W	53.0	4.9	6.3	25.6	28.0	30.4	120.9	133.1	28.0	-14.0	-64.9	-116.7	51.8	
R	72	26	8	8	N	80	9	36	W	53.8	4.1	5.8	25.2	28.0	30.4	120.2	132.9	20.0	-16.0	-72.2	-118.5	46.4	
R	72	26	8	8	N	80	9	36	W	53.8	4.1	5.8	25.2	28.0	30.4	120.2	132.9	28.0	-14.0	-64.2	-116.5	52.4	
R	73	26	8	53	N	80	8	23	W	54.2	6.7	7.3	26.1	28.0	30.2	122.2	133.2	20.0	-16.0	-74.2	-119.1	44.9	*
R	73	26	8	53	N	80	8	23	W	54.2	6.7	7.3	26.1	28.0	30.2	122.2	133.2	31.4	-10.6	-62.8	-113.7	50.9	
R	74	26	6	18	N	80	12	11	W	56.7	357.8	2.4	23.0	28.0	30.9	112.5	132.1	20.0	-16.0	-64.5	-117.3	52.7	
R	74	26	6	18	N	80	12	11	W	56.7	357.8	2.4	23.0	28.0	30.9	112.5	132.1	21.4	-15.1	-63.1	-116.4	53.2	
R	75	26	8	40	N	80	7	26	W	59.7	8.9	8.0	26.0	28.0	30.0	123.0	133.2	20.0	-16.0	-75.0	-119.2	44.2	*
R	75	26	8	40	N	80	7	26	W	59.7	8.9	8.0	26.0	28.0	30.0	123.0	133.2	31.4	-10.6	-63.6	-113.8	50.2	
R	76	26	8	36	N	80	7	23	W	60.4	9.1	8.0	26.0	28.0	29.9	123.0	133.2	20.0	-16.0	-75.0	-119.3	44.3	*
R	76	26	8	36	N	80	7	23	W	60.4	9.1	8.0	26.0	28.0	29.9	123.0	133.2	31.4	-10.6	-63.6	-113.9	50.3	
R	77	26	7	22	N	80	9	44	W	60.7	3.9	5.2	24.3	28.0	30.5	119.2	132.6	20.0	-16.0	-71.2	-118.1	46.9	
R	77	26	7	22	N	80	9	44	W	60.7	3.9	5.2	24.3	28.0	30.5	119.2	132.6	28.0	-14.0	-63.2	-116.1	52.9	
R	78	26	7	33	N	80	9	19	W	61.0	4.9	5.7	24.5	28.0	30.4	120.0	132.7	20.0	-16.0	-72.0	-118.3	46.3	
R	78	26	7	33	N	80	9	19	W	61.0	4.9	5.7	24.5	28.0	30.4	120.0	132.7	28.0	-14.0	-64.0	-116.3	52.3	
R	79	26	6	40	N	80	10	55	W	62.3	1.1	3.8	23.4	28.0	30.6	116.4	132.3	20.0	-16.0	-68.4	-117.7	49.3	
R	79	26	6	40	N	80	10	55	W	62.3	1.1	3.8	23.4	28.0	30.6	116.4	132.3	21.4	-15.6	-67.0	-117.3	50.3	

Rec. Site No.	Receive Site Coordinates North Latitude °	'	"		West Longitude °	'	"		AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
									(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R 80	26	8	26	N	80	7	4	W	62.6	9.8	8.2	25.8	28.0	29.9	123.2	133.1	20.0	-16.0	-75.2	-119.2	44.0	*
R 81	26	7	1	N	80	9	35	W	65.4	4.4	5.2	23.9	28.0	30.4	119.2	132.5	20.0	-16.0	-71.2	-118.1	46.9	
R 81	26	7	1	N	80	9	35	W	65.4	4.4	5.2	23.9	28.0	30.4	119.2	132.5	31.4	-10.6	-59.8	-112.7	52.9	
R 82	26	5	45	N	80	12	38	W	66.0	356.6	1.7	22.4	28.0	30.9	109.5	131.9	20.0	-16.0	-61.5	-117.0	55.5	
R 83	26	6	46	N	80	9	59	W	66.5	3.4	4.7	23.5	28.0	30.5	118.3	132.3	20.0	-16.0	-70.3	-117.9	47.6	
R 83	26	6	46	N	80	9	59	W	66.5	3.4	4.7	23.5	28.0	30.5	118.3	132.3	27.9	-7.1	-62.4	-109.0	46.6	
R 84	26	6	32	N	80	10	33	W	66.7	2.0	4.0	23.2	28.0	30.6	117.0	132.2	20.0	-16.0	-69.0	-117.6	48.6	
R 84	26	6	32	N	80	10	33	W	66.7	2.0	4.0	23.2	28.0	30.6	117.0	132.2	28.0	-14.0	-61.0	-115.6	54.6	
R 85	26	6	2	N	80	11	51	W	66.7	358.6	2.6	22.7	28.0	30.8	113.1	132.0	20.0	-16.0	-65.1	-117.2	52.1	
R 86	26	7	21	N	80	7	59	W	68.3	8.2	6.8	24.4	28.0	30.0	121.6	132.7	20.0	-16.0	-73.6	-118.7	45.1	
R 86	26	7	21	N	80	7	59	W	68.3	8.2	6.8	24.4	28.0	30.0	121.6	132.7	28.0	-14.0	-65.6	-116.7	51.1	
R 87	26	6	51	N	80	8	24	W	71.7	7.3	6.2	23.8	28.0	30.1	120.8	132.4	20.0	-16.0	-72.8	-118.3	45.5	
R 87	26	6	51	N	80	8	24	W	71.7	7.3	6.2	23.8	28.0	30.1	120.8	132.4	28.0	-14.0	-64.8	-116.3	51.5	
R 88	26	6	47	N	80	8	33	W	72.0	7.0	6.1	23.7	28.0	30.2	120.6	132.4	20.0	-16.0	-72.6	-118.2	45.7	
R 89	26	6	43	N	80	8	39	W	72.4	6.8	5.9	23.6	28.0	30.2	120.4	132.4	20.0	-16.0	-72.4	-118.2	45.8	
R 90	26	5	40	N	80	11	32	W	77.5	359.5	2.8	22.2	28.0	30.8	113.7	131.8	20.0	-16.0	-65.7	-117.1	51.4	
R 90	26	5	40	N	80	11	32	W	77.5	359.5	2.8	22.2	28.0	30.8	113.7	131.8	21.4	-18.0	-64.3	-119.1	54.8	
R 91	26	6	9	N	80	8	2	W	79.7	8.5	6.4	23.0	28.0	30.0	121.0	132.2	20.0	-16.0	-73.0	-118.2	45.1	
R 92	26	5	53	N	80	8	45	W	81.4	6.8	5.6	22.6	28.0	30.2	119.9	132.0	20.0	-16.0	-71.9	-117.8	45.9	
R 92	26	5	53	N	80	8	45	W	81.4	6.8	5.6	22.6	28.0	30.2	119.9	132.0	28.0	-14.0	-63.9	-115.8	51.9	
R 93	26	5	28	N	80	11	13	W	83.1	0.3	3.0	22.0	28.0	30.7	114.5	131.7	20.0	-16.0	-66.5	-117.0	50.5	
R 94	26	5	24	N	80	9	2	W	86.9	6.2	5.3	22.1	28.0	30.2	119.3	131.8	20.0	-16.0	-71.3	-117.6	46.2	
R 95	26	5	2	N	80	9	30	W	91.6	5.0	4.8	21.6	28.0	30.3	118.5	131.6	20.0	-16.0	-70.5	-117.3	46.8	
R 95	26	5	2	N	80	9	30	W	91.6	5.0	4.8	21.6	28.0	30.3	118.5	131.6	31.4	-10.6	-59.1	-111.9	52.8	
R 96	26	5	6	N	80	13	50	W	100.5	353.2	0.3	21.7	28.0	31.0	94.9	131.6	20.0	-19.0	-46.9	-119.6	72.8	
R 97	26	3	21	N	80	9	4	W	111.6	6.8	5.6	19.7	28.0	30.2	119.9	130.8	20.0	-18.6	-71.9	-119.2	47.3	

Rec. Site No.		Receive Site Coordinates North Latitude.				West Longitude				AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	97	26	3	21	N	80	9	4	W	111.6	6.8	5.6	19.7	28.0	30.2	119.9	130.8	28.0	-14.0	-63.9	-114.6	50.7	
R	98	26	2	47	N	80	8	35	W	115.4	8.6	6.3	19.1	28.0	30.0	121.0	130.5	20.0	-18.9	-73.0	-119.4	46.5	
R	99	26	2	11	N	80	8	19	W	119.6	9.7	6.9	18.5	28.0	29.9	121.7	130.2	20.0	-19.3	-73.7	-119.6	45.9	
R	99	26	2	11	N	80	8	19	W	119.6	9.7	6.9	18.5	28.0	29.9	121.7	130.2	28.0	-14.0	-65.7	-114.3	48.7	
R	100	26	2	39	N	80	9	17	W	119.8	6.4	5.8	18.9	28.0	30.2	120.1	130.4	20.0	-19.8	-72.1	-120.1	47.9	
R	101	26	2	31	N	80	9	11	W	120.6	6.8	5.9	18.7	28.0	30.2	120.4	130.4	20.0	-19.8	-72.4	-120.0	47.6	
R	101	26	2	31	N	80	9	11	W	120.6	6.8	5.9	18.7	28.0	30.2	120.4	130.4	21.4	-18.6	-71.0	-118.8	47.8	
R	102	26	1	41	N	80	8	35	W	124.8	9.2	7.0	17.9	28.0	29.9	121.8	129.9	20.0	-20.1	-73.8	-120.1	46.4	
R	102	26	1	41	N	80	8	35	W	124.8	9.2	7.0	17.9	28.0	29.9	121.8	129.9	31.4	-10.6	-62.4	-110.6	48.3	
R	103	26	0	26	N	80	8	32	W	133.2	10.1	7.9	16.5	28.0	29.8	122.9	129.2	20.0	-21.2	-74.9	-120.6	45.7	
R	103	26	0	26	N	80	8	32	W	133.2	10.1	7.9	16.5	28.0	29.8	122.9	129.2	31.4	-10.6	-63.5	-110.0	46.5	
R	104	26	1	25	N	80	9	46	W	133.6	5.3	6.2	17.4	28.0	30.3	120.8	129.7	20.0	-21.9	-72.8	-121.3	48.5	
R	105	26	2	43	N	80	11	52	W	140.1	358.3	3.6	18.8	28.0	30.8	116.1	130.4	20.0	-23.6	-68.1	-123.2	55.1	
R	105	26	2	43	N	80	11	52	W	140.1	358.3	3.6	18.8	28.0	30.8	116.1	130.4	28.0	-14.0	-60.1	-113.6	53.4	
R	106	26	1	30	N	80	10	50	W	140.9	1.7	5.4	17.4	28.0	30.6	119.6	129.7	20.0	-23.4	-71.6	-122.5	50.9	
R	107	26	0	0	N	80	9	41	W	142.2	6.2	7.5	15.8	28.0	30.2	122.4	128.9	20.0	-22.8	-74.4	-121.5	47.1	
R	107	26	0	0	N	80	9	41	W	142.2	6.2	7.5	15.8	28.0	30.2	122.4	128.9	31.4	-10.6	-63.0	-109.3	46.3	
R	108	25	59	54	N	80	9	42	W	142.8	6.2	7.6	15.7	28.0	30.2	122.5	128.8	20.0	-23.0	-74.5	-121.6	47.1	
R	108	25	59	54	N	80	9	42	W	142.8	6.2	7.6	15.7	28.0	30.2	122.5	128.8	31.4	-10.6	-63.1	-109.2	46.1	
R	109	26	2	37	N	80	12	2	W	143.3	357.8	3.6	18.7	28.0	30.9	116.1	130.4	20.0	-24.2	-68.1	-123.7	55.6	
R	109	26	2	37	N	80	12	2	W	143.3	357.8	3.6	18.7	28.0	30.9	116.1	130.4	28.0	-14.0	-60.1	-113.5	53.4	
R	110	25	59	2	N	80	9	10	W	143.9	8.7	8.7	14.8	28.0	30.0	123.7	128.3	20.0	-22.8	-75.7	-121.1	45.4	
R	110	25	59	2	N	80	9	10	W	143.9	8.7	8.7	14.8	28.0	30.0	123.7	128.3	28.0	-10.6	-67.7	-108.9	41.2	*
R	111	25	59	35	N	80	9	43	W	144.5	6.3	7.9	15.3	28.0	30.2	122.8	128.6	20.0	-23.2	-74.8	-121.7	46.9	
R	111	25	59	35	N	80	9	43	W	144.5	6.3	7.9	15.3	28.0	30.2	122.8	128.6	31.4	-10.6	-63.4	-109.0	45.6	
R	112	25	59	35	N	80	9	53	W	145.6	5.6	7.8	15.3	28.0	30.3	122.7	128.6	20.0	-23.4	-74.7	-121.7	47.0	
R	113	25	58	49	N	80	9	47	W	148.3	6.4	8.6	14.4	28.0	30.2	123.5	128.1	20.0	-23.6	-75.5	-121.6	46.0	

Rec.		Receive Site														Path Loss		Receive		Signal		Total	
Site		Coordinates								AZ from Tx		Dist to Tx		EIRP		Free Space		Antenna Gain		Level		D/U	
No.		North Latitude.				West Longitude				"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	114	26	1	50	N	80	11	56	W	149.2	358.0	4.4	17.8	28.0	30.8	117.8	129.9	20.0	-25.0	-69.8	-124.1	54.3	
R	115	26	0	13	N	80	11	20	W	153.0	0.0	6.4	16.0	28.0	30.7	121.0	129.0	20.0	-25.0	-73.0	-123.3	50.3	
R	116	26	1	53	N	80	12	29	W	155.6	356.2	4.1	17.9	28.0	30.9	117.2	130.0	20.0	-25.0	-69.2	-124.0	54.8	
R	117	25	58	44	N	80	11	31	W	159.9	359.2	7.9	14.3	28.0	30.8	122.8	128.0	20.0	-25.0	-74.8	-122.2	47.4	
R	117	25	58	44	N	80	11	31	W	159.9	359.2	7.9	14.3	28.0	30.8	122.8	128.0	27.9	-8.1	-66.9	-105.3	38.4	*
R	118	26	2	24	N	80	13	4	W	160.8	354.5	3.3	18.6	28.0	31.0	115.4	130.3	20.0	-25.0	-67.4	-124.3	56.9	
R	119	25	58	40	N	80	11	51	W	162.4	357.8	7.8	14.2	28.0	30.9	122.8	127.9	20.0	-25.0	-74.8	-122.1	47.3	
R	119	25	58	40	N	80	11	51	W	162.4	357.8	7.8	14.2	28.0	30.9	122.8	127.9	27.9	-8.1	-66.9	-105.2	38.3	*
R	120	26	0	41	N	80	12	52	W	165.7	354.5	5.3	16.6	28.0	31.0	119.4	129.3	20.0	-25.0	-71.4	-123.3	51.9	
R	121	26	0	38	N	80	13	4	W	168.0	353.8	5.3	16.5	28.0	31.0	119.4	129.3	20.0	-25.0	-71.4	-123.3	51.9	
R	121	26	0	38	N	80	13	4	W	168.0	353.8	5.3	16.5	28.0	31.0	119.4	129.3	31.4	-12.6	-60.0	-110.9	50.9	
R	122	25	56	41	N	80	12	16	W	168.8	355.4	9.9	11.9	28.0	31.0	124.8	126.4	20.0	-25.0	-76.8	-120.5	43.7	*
R	122	25	56	41	N	80	12	16	W	168.8	355.4	9.9	11.9	28.0	31.0	124.8	126.4	27.9	-8.1	-68.9	-103.6	34.7	*
R	123	26	4	22	N	80	13	59	W	170.2	352.5	0.9	20.9	28.0	31.0	104.1	131.3	20.0	-25.0	-56.1	-125.3	69.2	
R	123	26	4	22	N	80	13	59	W	170.2	352.5	0.9	20.9	28.0	31.0	104.1	131.3	21.4	-18.6	-54.7	-118.9	64.2	
R	124	26	0	6	N	80	13	19	W	171.7	352.6	5.9	16.0	28.0	31.0	120.3	129.0	20.0	-25.0	-72.3	-122.9	50.7	
R	125	26	1	10	N	80	13	32	W	172.3	352.4	4.6	17.2	28.0	31.0	118.2	129.6	20.0	-25.0	-70.2	-123.6	53.4	
R	126	26	4	27	N	80	14	2	W	172.7	352.4	0.8	21.0	28.0	31.0	103.1	131.4	20.0	-25.0	-55.1	-125.3	70.2	
R	126	26	4	27	N	80	14	2	W	172.7	352.4	0.8	21.0	28.0	31.0	103.1	131.4	21.4	-18.6	-53.7	-118.9	65.2	
R	127	26	2	4	N	80	13	44	W	173.4	352.2	3.6	18.3	28.0	31.0	116.0	130.1	20.0	-25.0	-68.0	-124.1	56.1	
R	128	26	1	1	N	80	13	39	W	174.0	351.9	4.8	17.1	28.0	31.1	118.5	129.5	20.0	-25.0	-70.5	-123.5	53.0	
R	128	26	1	1	N	80	13	39	W	174.0	351.9	4.8	17.1	28.0	31.1	118.5	129.5	28.0	-11.0	-62.5	-109.5	47.0	
R	129	25	59	15	N	80	13	30	W	174.5	351.4	6.8	15.0	28.0	31.1	121.6	128.4	20.0	-25.0	-73.6	-122.4	48.8	
R	129	25	59	15	N	80	13	30	W	174.5	351.4	6.8	15.0	28.0	31.1	121.6	128.4	28.0	-11.0	-65.6	-108.4	42.8	*
R	130	26	1	47	N	80	13	48	W	174.9	351.8	3.9	17.9	28.0	31.1	116.7	130.0	20.0	-25.0	-68.7	-123.9	55.2	
R	130	26	1	47	N	80	13	48	W	174.9	351.8	3.9	17.9	28.0	31.1	116.7	130.0	21.4	-18.6	-67.3	-117.5	50.2	

Rec.		Receive Site														Path Loss		Receive		Signal		Total	
Site		Coordinates								AZ from Tx		Dist to Tx		EIRP		Free Space		Antenna Gain		Level		D/U	
No.		North Latitude.				West Longitude				"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	131	25	58	44	N	80	13	32	W	175.2	350.9	7.4	14.4	28.0	31.1	122.3	128.1	20.0	-25.0	-74.3	-122.0	47.7	
R	131	25	58	44	N	80	13	32	W	175.2	350.9	7.4	14.4	28.0	31.1	122.3	128.1	28.0	-11.0	-66.3	-108.0	41.7	*
R	132	25	58	45	N	80	13	39	W	176.1	350.5	7.4	14.5	28.0	31.1	122.3	128.1	20.0	-25.0	-74.3	-122.0	47.8	
R	132	25	58	45	N	80	13	39	W	176.1	350.5	7.4	14.5	28.0	31.1	122.3	128.1	28.0	-11.0	-66.3	-108.0	41.8	*
R	133	26	1	3	N	80	14	1	W	178.5	350.7	4.7	17.2	28.0	31.1	118.4	129.6	20.0	-25.0	-70.4	-123.5	53.1	
R	133	26	1	3	N	80	14	1	W	178.5	350.7	4.7	17.2	28.0	31.1	118.4	129.6	21.4	-18.6	-69.0	-117.1	48.1	
R	134	25	59	5	N	80	14	25	W	182.4	347.7	7.0	15.0	28.0	31.1	121.8	128.4	20.0	-25.0	-73.8	-122.3	48.5	
R	134	25	59	5	N	80	14	25	W	182.4	347.7	7.0	15.0	28.0	31.1	121.8	128.4	31.4	-12.6	-62.4	-109.9	47.5	
R	135	25	58	31	N	80	14	38	W	183.9	346.3	7.6	14.4	28.0	31.2	122.6	128.1	20.0	-25.0	-74.6	-121.9	47.3	
R	135	25	58	31	N	80	14	38	W	183.9	346.3	7.6	14.4	28.0	31.2	122.6	128.1	31.4	-12.6	-63.2	-109.5	46.3	
R	136	25	58	31	N	80	15	14	W	188.5	343.9	7.7	14.6	28.0	31.2	122.6	128.2	20.0	-25.0	-74.6	-121.9	47.3	
R	136	25	58	31	N	80	15	14	W	188.5	343.9	7.7	14.6	28.0	31.2	122.6	128.2	28.0	-11.0	-66.6	-107.9	41.3	*
R	137	26	4	32	N	80	14	15	W	189.6	351.8	0.7	21.1	28.0	31.1	102.0	131.4	20.0	-25.0	-54.0	-125.3	71.3	
R	137	26	4	32	N	80	14	15	W	189.6	351.8	0.7	21.1	28.0	31.1	102.0	131.4	21.4	-18.6	-52.6	-118.9	66.3	
R	138	25	58	31	N	80	15	41	W	191.9	342.2	7.8	14.7	28.0	31.2	122.7	128.3	20.0	-25.0	-74.7	-122.0	47.3	
R	138	25	58	31	N	80	15	41	W	191.9	342.2	7.8	14.7	28.0	31.2	122.7	128.3	31.4	-11.6	-63.3	-108.6	45.3	
R	139	26	0	32	N	80	15	52	W	198.6	344.0	5.6	17.0	28.0	31.2	119.9	129.5	20.0	-24.2	-71.9	-122.5	50.6	
R	139	26	0	32	N	80	15	52	W	198.6	344.0	5.6	17.0	28.0	31.2	119.9	129.5	21.4	-18.6	-70.5	-116.9	46.4	
R	140	25	59	13	N	80	16	28	W	199.5	340.3	7.2	15.7	28.0	31.3	122.1	128.8	20.0	-23.5	-74.1	-121.1	47.0	
R	140	25	59	13	N	80	16	28	W	199.5	340.3	7.2	15.7	28.0	31.3	122.1	128.8	31.4	-10.6	-62.7	-108.2	45.5	
R	141	26	4	22	N	80	14	27	W	200.0	351.2	1.0	21.0	28.0	31.1	104.5	131.3	20.0	-25.0	-56.5	-125.3	68.7	
R	142	26	1	43	N	80	15	43	W	202.5	345.6	4.3	18.3	28.0	31.2	117.5	130.1	20.0	-23.9	-69.5	-122.9	53.3	
R	142	26	1	43	N	80	15	43	W	202.5	345.6	4.3	18.3	28.0	31.2	117.5	130.1	28.0	-11.0	-61.5	-109.9	48.4	
R	143	26	0	5	N	80	18	13	W	215.9	335.8	7.2	17.3	28.0	31.3	122.0	129.7	20.0	-20.6	-74.0	-119.0	45.0	*
R	143	26	0	5	N	80	18	13	W	215.9	335.8	7.2	17.3	28.0	31.3	122.0	129.7	31.4	-10.6	-62.6	-109.0	46.4	
R	144	26	2	42	N	80	16	25	W	219.9	344.4	3.7	19.5	28.0	31.2	116.2	130.7	20.0	-21.3	-68.2	-120.8	52.6	
R	144	26	2	42	N	80	16	25	W	219.9	344.4	3.7	19.5	28.0	31.2	116.2	130.7	21.4	-18.6	-66.8	-118.1	51.3	
R	145	26	3	3	N	80	16	7	W	220.3	345.6	3.2	19.9	28.0	31.2	114.9	130.9	20.0	-21.5	-66.9	-121.1	54.2	

Rec. Site No.		Receive Site Coordinates North Latitude.				West Longitude				AZ from Tx "D"	AZ from Tx "U"	Dist to Tx "D"	Dist to Tx "U"	EIRP "D"	EIRP "U"	Path Loss Free Space "D"	Path Loss Free Space "U"	Receive Antenna Gain "D"	Receive Antenna Gain "U"	Signal Level "D"	Signal Level "U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	146	26	0	51	N	80	18	17	W	220.9	336.7	6.5	18.2	28.0	31.3	121.2	130.1	20.0	-20.1	-73.2	-118.9	45.7	
R	146	26	0	51	N	80	18	17	W	220.9	336.7	6.5	18.2	28.0	31.3	121.2	130.1	31.4	-10.6	-61.8	-109.4	47.6	
R	147	26	1	28	N	80	18	20	W	225.7	337.4	6.1	18.8	28.0	31.3	120.6	130.4	20.0	-19.6	-72.6	-118.7	46.1	
R	147	26	1	28	N	80	18	20	W	225.7	337.4	6.1	18.8	28.0	31.3	120.6	130.4	21.4	-18.6	-71.2	-117.7	46.6	
R	148	26	0	45	N	80	19	18	W	226.5	333.6	7.4	18.5	28.0	31.3	122.2	130.3	20.0	-19.0	-74.2	-118.0	43.8	*
R	148	26	0	45	N	80	19	18	W	226.5	333.6	7.4	18.5	28.0	31.3	122.2	130.3	28.0	-14.0	-66.2	-113.0	46.7	
R	149	26	1	47	N	80	18	20	W	228.3	337.8	5.8	19.2	28.0	31.3	120.2	130.6	20.0	-19.3	-72.2	-118.5	46.4	
R	149	26	1	47	N	80	18	20	W	228.3	337.8	5.8	19.2	28.0	31.3	120.2	130.6	28.0	-14.0	-64.2	-113.3	49.1	
R	150	26	3	26	N	80	16	26	W	230.3	345.0	3.1	20.4	28.0	31.2	114.7	131.1	20.0	-20.0	-66.7	-119.8	53.1	
R	151	26	3	21	N	80	18	11	W	243.7	340.1	4.7	20.8	28.0	31.3	118.3	131.3	20.0	-16.0	-70.3	-116.0	45.7	
R	151	26	3	21	N	80	18	11	W	243.7	340.1	4.7	20.8	28.0	31.3	118.3	131.3	21.4	-18.6	-68.9	-118.6	49.7	
R	152	26	4	30	N	80	16	7	W	250.0	346.7	2.2	21.5	28.0	31.2	111.7	131.5	20.0	-16.0	-63.7	-116.4	52.7	
R	152	26	4	30	N	80	16	7	W	250.0	346.7	2.2	21.5	28.0	31.2	111.7	131.5	31.4	-10.6	-52.3	-111.0	58.7	
R	153	26	2	43	N	80	21	41	W	250.3	330.4	8.3	21.7	28.0	31.2	123.3	131.6	20.0	-16.0	-75.3	-116.4	41.1	*
R	153	26	2	43	N	80	21	41	W	250.3	330.4	8.3	21.7	28.0	31.2	123.3	131.6	31.4	-10.6	-63.9	-111.0	47.1	
R	154	26	5	45	N	80	22	21	W	274.6	333.0	8.5	25.1	28.0	31.3	123.5	132.9	20.0	-16.0	-75.5	-117.6	42.1	*
R	154	26	5	45	N	80	22	21	W	274.6	333.0	8.5	25.1	28.0	31.3	123.5	132.9	28.0	-14.0	-67.5	-115.6	48.1	
R	155	26	6	16	N	80	23	29	W	277.6	331.3	9.7	26.1	28.0	31.3	124.7	133.2	20.0	-16.0	-76.7	-118.0	41.3	*
R	155	26	6	16	N	80	23	29	W	277.6	331.3	9.7	26.1	28.0	31.3	124.7	133.2	28.0	-14.0	-68.7	-116.0	47.3	
R	156	26	6	11	N	80	21	49	W	278.5	334.6	8.0	25.3	28.0	31.3	123.0	133.0	20.0	-16.0	-75.0	-117.7	42.7	*
R	157	26	6	54	N	80	23	31	W	281.7	332.0	9.9	26.8	28.0	31.3	124.8	133.5	20.0	-16.0	-76.8	-118.2	41.4	*
R	157	26	6	54	N	80	23	31	W	281.7	332.0	9.9	26.8	28.0	31.3	124.8	133.5	31.4	-10.6	-65.4	-112.8	47.4	
R	158	26	6	17	N	80	19	45	W	282.7	339.2	5.9	24.5	28.0	31.3	120.4	132.7	20.0	-16.0	-72.4	-117.4	45.0	
R	158	26	6	17	N	80	19	45	W	282.7	339.2	5.9	24.5	28.0	31.3	120.4	132.7	21.4	-14.1	-71.0	-115.5	44.5	*
R	159	26	6	17	N	80	19	32	W	283.2	339.7	5.7	24.5	28.0	31.3	120.1	132.7	20.0	-16.0	-72.1	-117.4	45.3	
R	159	26	6	17	N	80	19	32	W	283.2	339.7	5.7	24.5	28.0	31.3	120.1	132.7	21.4	-15.2	-70.7	-116.6	45.9	
R	160	26	7	54	N	80	19	9	W	301.4	341.9	6.1	26.1	28.0	31.3	120.6	133.2	20.0	-16.0	-72.6	-118.0	45.4	
R	160	26	7	54	N	80	19	9	W	301.4	341.9	6.1	26.1	28.0	31.3	120.6	133.2	28.0	-14.0	-64.6	-116.0	51.4	

Rec.		Receive Site														Path Loss		Receive		Signal		Total	
Site		Coordinates								AZ from Tx		Dist to Tx		EIRP		Free Space		Antenna Gain		Level		D/U	
No.		North Latitude.				West Longitude				"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	"D"	"U"	Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	161	26	7	47	N	80	17	1	W	315.5	346.6	4.2	25.4	28.0	31.2	117.5	133.0	20.0	-16.0	-69.5	-117.8	48.4	
R	161	26	7	47	N	80	17	1	W	315.5	346.6	4.2	25.4	28.0	31.2	117.5	133.0	31.4	-5.2	-58.1	-107.0	49.0	
R	162	26	9	3	N	80	17	12	W	324.8	346.9	5.5	26.8	28.0	31.2	119.7	133.5	20.0	-16.0	-71.7	-118.3	46.6	
R	163	26	10	18	N	80	17	44	W	327.9	346.5	7.0	28.3	28.0	31.2	121.8	133.9	20.0	-16.0	-73.8	-118.8	45.0	*
R	163	26	10	18	N	80	17	44	W	327.9	346.5	7.0	28.3	28.0	31.2	121.8	133.9	28.0	-11.0	-65.8	-113.8	48.0	
R	164	26	10	3	N	80	17	2	W	332.0	347.8	6.4	27.9	28.0	31.1	121.0	133.8	20.0	-16.0	-73.0	-118.7	45.7	
R	164	26	10	3	N	80	17	2	W	332.0	347.8	6.4	27.9	28.0	31.1	121.0	133.8	28.0	-10.0	-65.0	-112.7	47.7	
R	165	26	9	3	N	80	16	15	W	334.0	349.0	5.0	26.6	28.0	31.1	118.9	133.4	20.0	-13.3	-70.9	-115.5	44.7	*
R	166	26	9	4	N	80	16	9	W	335.2	349.2	5.0	26.6	28.0	31.1	118.8	133.4	20.0	-13.3	-70.8	-115.5	44.7	*
R	166	26	9	4	N	80	16	9	W	335.2	349.2	5.0	26.6	28.0	31.1	118.8	133.4	21.4	-8.6	-69.4	-110.9	41.5	*
R	167	26	11	11	N	80	16	20	W	341.9	349.7	7.3	29.0	28.0	31.1	122.2	134.2	20.0	-2.6	-74.2	-105.7	31.5	*
R	167	26	11	11	N	80	16	20	W	341.9	349.7	7.3	29.0	28.0	31.1	122.2	134.2	28.0	-5.0	-66.2	-108.1	41.9	*
R	168	26	11	7	N	80	16	9	W	343.1	350.1	7.2	28.9	28.0	31.1	122.0	134.1	20.0	-1.8	-74.0	-104.8	30.8	*
R	169	26	15	35	N	80	17	26	W	344.2	349.4	12.5	34.2	28.0	31.1	126.8	135.6	20.0	-1.0	-78.8	-105.5	26.7	*
R	169	26	15	35	N	80	17	26	W	344.2	349.4	12.5	34.2	28.0	31.1	126.8	135.6	27.9	-2.1	-70.9	-106.6	35.7	*
R	170	26	13	57	N	80	16	48	W	344.8	349.9	10.5	32.3	28.0	31.1	125.3	135.1	20.0	-1.0	-77.3	-105.0	27.7	*
R	170	26	13	57	N	80	16	48	W	344.8	349.9	10.5	32.3	28.0	31.1	125.3	135.1	28.0	-5.0	-69.3	-109.0	39.7	*
R	171	26	16	23	N	80	17	27	W	345.2	349.6	13.4	35.1	28.0	31.1	127.4	135.8	20.0	-0.5	-79.4	-105.2	25.8	*
R	172	26	16	35	N	80	17	29	W	345.3	349.6	13.6	35.4	28.0	31.1	127.6	135.9	20.0	-0.5	-79.6	-105.3	25.7	*
R	173	26	10	36	N	80	15	26	W	347.9	351.4	6.4	28.2	28.0	31.1	121.0	133.9	20.0	-0.1	-73.0	-103.0	29.9	*
R	173	26	10	36	N	80	15	26	W	347.9	351.4	6.4	28.2	28.0	31.1	121.0	133.9	28.0	-5.0	-65.0	-107.9	42.8	*
R	174	26	13	55	N	80	16	11	W	348.1	351.0	10.3	32.1	28.0	31.1	125.2	135.0	20.0	0.0	-77.2	-104.0	26.8	*
R	174	26	13	55	N	80	16	11	W	348.1	351.0	10.3	32.1	28.0	31.1	125.2	135.0	21.4	-8.6	-75.8	-112.6	36.8	*
R	175	26	8	25	N	80	14	41	W	351.4	352.2	3.8	25.6	28.0	31.0	116.5	133.1	20.0	0.0	-68.5	-102.0	33.5	*
R	175	26	8	25	N	80	14	41	W	351.4	352.2	3.8	25.6	28.0	31.0	116.5	133.1	21.4	-8.6	-67.1	-110.6	43.5	*
R	176	26	17	10	N	80	15	53	W	352.6	352.4	13.9	35.8	28.0	31.0	127.8	136.0	20.0	0.0	-79.8	-104.9	25.1	*
R	176	26	17	10	N	80	15	53	W	352.6	352.4	13.9	35.8	28.0	31.0	127.8	136.0	31.4	-3.6	-68.4	-108.5	40.1	*

Rec. Site No.		Receive Site Coordinates North Latitude. °	'	"		West Longitude °	'	"		AZ from Tx "D" (°)	AZ from Tx "U" (°)	Dist to Tx "D" mi.	Dist to Tx "U" mi.	EIRP "D" dBW	EIRP "U" dBW	Path Loss Free Space "D" dB	Path Loss Free Space "U" dB	Receive Antenna Gain "D" dB	Receive Antenna Gain "U" dB	Signal Level "D" dB	Signal Level "U" dB	Total D/U Ratio dB	
R	177	26	17	50	N	80	15	54	W	352.9	352.6	14.7	36.5	28.0	31.0	128.2	136.2	20.0	0.0	-80.2	-105.1	24.9	*
R	177	26	17	50	N	80	15	54	W	352.9	352.6	14.7	36.5	28.0	31.0	128.2	136.2	28.0	-5.0	-72.2	-110.1	37.9	*
R	178	26	18	18	N	80	15	58	W	352.9	352.6	15.2	37.1	28.0	31.0	128.6	136.3	20.0	0.0	-80.6	-105.2	24.7	*
R	178	26	18	18	N	80	15	58	W	352.9	352.6	15.2	37.1	28.0	31.0	128.6	136.3	28.0	-5.0	-72.6	-110.2	37.7	*
R	179	26	12	58	N	80	15	13	W	352.9	352.5	9.1	30.9	28.0	31.0	124.0	134.7	20.0	0.0	-76.0	-103.7	27.6	*
R	180	26	14	39	N	80	15	25	W	353.1	352.6	11.0	32.8	28.0	31.0	125.7	135.2	20.0	0.0	-77.7	-104.2	26.5	*
R	180	26	14	39	N	80	15	25	W	353.1	352.6	11.0	32.8	28.0	31.0	125.7	135.2	21.4	-8.6	-76.3	-112.8	36.5	*
R	181	26	8	4	N	80	14	24	W	355.3	352.8	3.4	25.2	28.0	31.0	115.4	132.9	20.0	0.0	-67.4	-101.9	34.4	*
R	181	26	8	4	N	80	14	24	W	355.3	352.8	3.4	25.2	28.0	31.0	115.4	132.9	28.0	-5.0	-59.4	-106.9	47.4	
R	182	26	8	41	N	80	14	27	W	355.4	352.9	4.1	25.9	28.0	31.0	117.1	133.2	20.0	0.0	-69.1	-102.1	33.0	*
R	183	26	9	9	N	80	14	25	W	356.4	353.1	4.6	26.4	28.0	31.0	118.2	133.3	20.0	-0.1	-70.2	-102.4	32.3	*
R	184	26	8	10	N	80	14	19	W	356.9	353.0	3.5	25.3	28.0	31.0	115.7	133.0	20.0	-0.1	-67.7	-102.0	34.3	*
R	185	26	14	51	N	80	14	41	W	357.1	354.0	11.2	33.0	28.0	31.0	125.9	135.3	20.0	-0.1	-77.9	-104.3	26.5	*
R	185	26	14	51	N	80	14	41	W	357.1	354.0	11.2	33.0	28.0	31.0	125.9	135.3	27.9	-2.1	-70.0	-106.3	36.4	*
R	186	26	16	5	N	80	14	27	W	358.5	354.6	12.6	34.4	28.0	31.0	126.9	135.6	20.0	-0.1	-78.9	-104.7	25.8	*
R	186	26	16	5	N	80	14	27	W	358.5	354.6	12.6	34.4	28.0	31.0	126.9	135.6	31.4	-3.6	-67.5	-108.2	40.7	*
R	187	26	12	28	N	80	14	20	W	358.6	354.1	8.4	30.2	28.0	31.0	123.4	134.5	20.0	-0.5	-75.4	-104.0	28.6	*
R	187	26	12	28	N	80	14	20	W	358.6	354.1	8.4	30.2	28.0	31.0	123.4	134.5	21.4	-8.6	-74.0	-112.1	38.1	*
R	188	26	14	10	N	80	14	21	W	358.8	354.4	10.4	32.2	28.0	31.0	125.2	135.0	20.0	-0.5	-77.2	-104.6	27.3	*
R	189	26	17	59	N	80	14	14	W	359.6	355.3	14.8	36.5	28.0	31.0	128.3	136.2	20.0	-0.5	-80.3	-105.7	25.4	*
R	189	26	17	59	N	80	14	14	W	359.6	355.3	14.8	36.5	28.0	31.0	128.3	136.2	28.0	-5.0	-72.3	-110.2	37.9	*
R	190	26	7	16	N	80	9	35	W	62.6	4.3	5.3	24.1	28.0	30.4	119.4	132.6	20.0	-16.0	-71.4	-118.2	46.8	
R	190	26	7	16	N	80	9	35	W	62.6	4.3	5.3	24.1	28.0	30.4	119.4	132.6	27.9	-7.1	-63.5	-109.3	45.8	
R	191	26	16	15	N	80	17	41	W	344.0	349.2	13.3	35.0	28.0	31.1	127.4	135.8	20.0	-1.0	-79.4	-105.7	26.3	*
R	192	26	1	39	N	80	23	29	W	247.4	324.5	10.5	21.6	28.0	31.2	125.3	131.6	20.0	-16.0	-77.3	-116.4	39.1	*
R	193	26	6	11	N	80	17	4	W	291.4	345.4	3.3	23.6	28.0	31.2	115.1	132.4	20.0	-16.0	-67.1	-117.2	50.0	

Rec. Site No.		Receive Site Coordinates North Latitude.				West Longitude				AZ from Tx "D"	"U"	Dist to Tx "D"	"U"	EIRP "D"	"U"	Path Loss Free Space "D"	"U"	Receive Antenna Gain "D"	"U"	Signal Level "D"	"U"	Total D/U Ratio	
		°	'	"		°	'	"		(°)	(°)	mi.	mi.	dBW	dBW	dB	dB	dB	dB	dB	dB	dB	
R	194	26	1	13	N	80	24	26	W	247.0	321.6	11.6	21.8	28.0	31.1	126.2	131.7	20.0	-16.0	-78.2	-116.5	38.4	*
R	194	26	1	13	N	80	24	26	W	247.0	321.6	11.6	21.8	28.0	31.1	126.2	131.7	28.0	-14.0	-70.2	-114.5	44.4	*
R	195	26	7	37	N	80	23	58	W	285.6	331.9	10.5	27.7	28.0	31.3	125.4	133.8	20.0	-16.0	-77.4	-118.5	41.1	*
R	195	26	7	37	N	80	23	58	W	285.6	331.9	10.5	27.7	28.0	31.3	125.4	133.8	28.0	-14.0	-69.4	-116.5	47.1	
R	196	26	18	39	N	80	11	53	W	8.5	359.1	15.7	37.2	28.0	30.8	128.8	136.3	20.0	-5.0	-80.8	-110.5	29.7	*
R	197	26	1	7	N	80	20	55	W	236.5	329.8	8.4	19.7	28.0	31.2	123.4	130.8	20.0	-16.0	-75.4	-115.6	40.2	*
R	198	26	17	46	N	80	16	53	W	348.9	351.0	14.8	36.6	28.0	31.1	128.3	136.2	20.0	0.0	-80.3	-105.1	24.8	*
R	199	26	1	18	N	80	19	17	W	230.2	334.5	6.9	19.1	28.0	31.3	121.7	130.5	20.0	-18.6	-73.7	-117.8	44.1	*
R	200	26	9	53	N	80	15	15	W	348.0	351.5	5.6	27.4	28.0	31.1	119.8	133.6	20.0	-0.1	-71.8	-102.7	30.9	*

CERTIFICATE OF SERVICE

I, Kerstin Koops Budlong, hereby certify that on this date I caused the foregoing "Opposition to Petition for Reconsideration" to be served by first class mail, postage prepaid, on the following:

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Dated: September 29, 2004